ELSEVIER

Biochemical Pharmacology 63 (2002) 2223–2228

Biochemical Pharmacology

Author index Volume 63

Abarca, J., 1343
Abe, H., 81
Abood, M.E., 2121
Abou-Donia, M.B., 11
Ackroyd, J., 2187
Adeli, K., 349
Ahomadegbe, J.-C., 1609
Aiyar, N., 1949
Ajuebor, M.N., 1191
Åkerman, K.E., 1675
Akhtar, S., 2187
Akiba, S., 1969
Albertioni, F., 259
Ale-Agha, N., 2145
Alessandrini, C., 967
Alexson, S.E.H., 1893
Alfonso, A., 1979
Aloyz, R.S., 1585
André, N., 1831
Andreassi, M., 437
Aniya, Y., 1019, 1725
Anselmi, C., 437
Anthony, T.L., 1797
Antoine, M.-H., 515
Antunes, E., 65
Ao, Z., 1949
Arakawa, T., 73
Ardelt, B., 625
Asahi, M., 777
Asai, F., 1911
Ashikaga, T., 797
Assaraf, Y.G., 105
Attele, A.S., 1579
Austin, C.A., 1807
Azevedo, I., 1565

Babani, S., 1717
Bailly, C., 1443
Baker, G.B., 57
Baker, J.R., 693
Banchelli, G., 2063
Baraldi, P.G., 157
Barker, S., 149
Barnett-Norris, J., 2121
Barret, J.-M., 251
Barrows, L.R., 707
Barsotti, C., 117
Bartholomä, P., 1507
Bauer, P.I., 455
Baumann, B., 1507
Bécuwe, P., 237
Bedoucha, M., 1
Beech, R.N., 1061
Beers, J.C.C., 897
Beljaars, L., 1663
Bello, V.E., 1585
Bénard, J., 1609
Benatallah, Z., 1863
Bennett, B.M., 1397
Benoit, E., 1453
Berente, Z., 1099
Berge, R.K., 1127
Berkhout, B., 1663
Berman, E., 1219
Bernath, S., 921, 1099
Bernelli-Zazzera, A., 139
Bianchi, A., 237
Bibby, M., 2187
Bijsterbosch, M.K., 1843
Bjeldanes, L.F., 1085
Björkhem-Bergman, L., 1875
Björnstedt, M., 1875
Blankenship, J., 2011
Blarzino, C., 1885
Bloch, K., 171
Bloch, O., 171
Blumenstein, M., 409
Bock, K.W., 123, 1683
Bock-Hennig, B.S., 123, 1683
Boddy, A.V., 207
Boeck, A.T., 2101
Boelsterli, U.A., 1
Boggetto, N., 1863
Bohov, P., 1127
Boiardi, A., 881
Bon, C., 755
Borea, P.A., 157
Botana, L.M., 1979
Bouaziz, N., 321
Bouchal, J., 1177
Boulet, L., 1527
Boven, E., 733, 897
Boyd, G., 607
Boyd, J.L., 1517
Braguer, D., 1831
Brandenburg, J.O., 1683
Brecher, P., 1197
Brehm, B.R., 1361
Brémaud, L., 823
Briand, C., 1831
Broeck, J.V., 1675
Broxterman, H.J., 897
Brueggemann, S.K., 1337
Bruno, C., 375
Bryła, J., 1371
Buehner, K., 2121
Buki, K.G., 455
Bunni, M.A., 105
Bunzow, J.R., 859
Burchell, B., 607, 1683
Burcher, E., 217, 2181
Buronfosse, T., 1453
Buschini, A., 967
Bussygyna, O., 763
Bustos, G., 1343
Buters, J., 2159
Byrd, J.C., 1229

Cabado, A.G., 1979
Cabral, G.A., 2121
Cadou, M., 251
Calderon, P.B., 1773
Calhau, C., 1565
Camello, P.J., 283
Camello-Almaraz, C., 283
Campusano, J.M., 1343
Capra, V., 1537
Capron, C.C., 933
Caputi, A.P., 293, 785
Carenini, N., 881
Carles, G., 1831
Carlo-Stella, C., 967
Carrasco, M.P., 1485
Carré, M., 1831
Carrupt, P.-A., 1691
Castro, J., 1997
Centini, M., 437
Cervantes-Laurean, D., 361
Cha, M.C., 717
Chabot, G.G., 933
Chan, M.M.-Y., 99
Chang, L.-C., 577
Chaubet, F., 129
Che, C.-T., 951
Cheah, L.-S., 49
Chen, A., 871
Chen, C.-C., 199
Chen, C.P., 853
Chen, Q., 1389
Chen, X., 533
Chen, Y.-C., 225
Cheng, A.-L., 1423, 1709
Chesnut, M.D., 1499
Chiang, H.-T., 199
Chiba, K., 889
Chiba, M., 1969
Chikuma, T., 1857
Cho, D., 1901
Cho-Chung, Y.S., 659
Chou, K.-M., 1143
Choudhary, K., 1149
Christodoulopoulos, G., 1585
Chuang, S.-E., 1423, 1709
Chung, S.W., 1901
Chute, I.C., 1527

PII: S0006-2952(02)01122-X

Ciccolini, J., 1831
Cini, C., 1885
Ciofani, G., 375
Ciusani, E., 881
Claveau, D., 1527
Cnop, M., 1281
Coccia, R., 1885
Colige, A., 179
Collet, P., 237
Collier, A.C., 409
Commandeur, J.N.M., 1843
Comstock, J.A., 455
Conney, A.H., 985
Corder, R., 149
Corna, E., 881
Courtois, A., 333
Cox, B.R., 843
Crespi, C., 1941
Crocenzi, F.A., 1553
Crooks, P.A., 89
Csete, B., 921
Cuccurullo, F., 375
Cummings, J., 607
Cuzzocrea, S., 293, 785

Dachs, G.U., 265
Dahlmans, V.E.H., 1755
Dai, Q., 1165
Dai, W., 1165
Dalton, T.P., 1739
Darzynkiewicz, Z., 625
Das, D.K., 543
Dauça, M., 237
Dawson, P.A., 1553
Dawson, S.J., 615
Dawson Jr., R., 1051
De Backer, J.-P., 1273
De Loof, A., 1675
De Matteis, F., 615
de Miranda, A.L.P., 1589
De Nucci, G., 65
De Sarro, A., 785
De Simone, C., 1305
de Vries, E.G.E., 1989
de Wit, E.C.M., 1755
Deady, L.W., 833
Dean Nelson, B., 1893
Dean, N.M., 1699
Deby-Dupont, G., 1863
Deeken, M., 1337
Dekura, E., 2043
Del Rio, M.J., 677
Delabar, U., 809
Deng, H.B., 1149
DePetrillo, P.B., 1481
DePierre, J.W., 1893
Detaille, D., 1259
Detheux, M., 1675
Devos, P., 1259
Devy, L., 179
Di Stefano, A., 437
Dieter, M.Z., 1739
Dietrich, C.P., 65
Ding, Z., 1415
Disa, J., 1949
Domenjoud, L., 237
Dong, H., 533
Donnelly, R., 993
Donohue Jr., T.M., 1229
Dorandeu, F., 755
Double, J., 2187
Douglas Boudinot, F., 1517
Douglas, S.A., 1949
Douillard, S., 1831
Dowdy, D.L., 1599
Draijer, R., 1755
Drieu, K., 1241
Drori, S., 105
Dubay, G.R., 843
Dugo, L., 293, 785
Dunnion, D., 2187
Durán, H., 1785
Durant, F., 1863
Duyndam, M.C.A., 733
Dwoskin, L.P., 89, 1499
Dzięgielewski, J., 1653

Ea, C.-K., 1423
Edler, M.C., 707
Edmondson, D.E., 865
Edwards, R.J., 693
Eichelbaum, M.F., 1683
Eisenbrand, G., 659, 669
Ekelund, S., 1491
Elderkamp, Y.W., 897
Eliaers, F., 321
Engel, N., 1785
Enomoto, R., 1315
Eppler, B., 1051
Eriksson, E., 2151
Eriksson, L.C., 1875
Erlandsson, N., 1507
Errington, F., 1807
Errington, J., 207
Ervin, H.D., 2055
Esuvaranathan, K., 273
Ethell, B.T., 607
Ettorre, A., 437
Everett, S.A., 1629

Fabian, I., 1325
Facchinetti, F., 881
Famin, O., 393
Famularo, G., 1305
Fardel, O., 333
Faridoni-Laurens, L., 1609
Fariss, M.W., 751
Farkas, B., 921
Faure, G., 755
Fautrel, A., 745
Fernandez, A.M., 707
Fernández-Tomé, M.d.C., 507
Ferrer-Miralles, N., 1251
Fierens, F.L.P., 1273
Firestone, G.L., 1085
Fitzsimons, C., 1785
Florea, B.I., 1119
Floris, R., 1663
Foidart, J.-M., 179
Fokkema, E., 1989
Fokt, I., 1471
Folkes, L.K., 265
Foppoli, C., 1885
Foquin, A., 755
Forray, M.I., 1343
Forrester, S.G., 1061
Foss, F., 689
Four, E., 755
Fredriksson, E., 259
Freeman, T.L., 697
Frenette, R., 1527
Frenzel, S., 909
Freshwater, S., 1739
Freudenberg, J., 1361
Friedmann, F., 1361
Fries, D., 2011
Fuhr, U., 2159
Fujii, S., 485
Fujimoto, Y., 2069
Fujino, H., 1797
Fukui, T., 1851
Fuly, A.L., 1589
Furukawa, M., 1077
Fusar-Poli, D., 139

Gallagher, E.P., 2025
Gallo, J.M., 1219
Gallyas Jr., F., 1099
Gambero, A., 65
Gamcsik, M.P., 843
Ganley, N.A., 409
Gao, M., 1709
García-Villafranca, J., 1997
Gardner, J.L., 2025
Garnier, F.V., 1453
Garnier-Suillerot, A., 1471
Garnotel, R., 179
Geisbuhler, T.P., 2055
Geisslinger, G., 1575
Gekker, G., 1037
Gellerich, F.N., 725
Gentile, S.L., 31, 2001
Gessi, S., 157
Giamberardino, M.A., 375
Gibraeil, H.D., 1137
Giehl, K.M., 1507
Giglio, J.R., 65
Gilloteaux, J., 1773
Ginsburg, H., 393
Girard, F., 755
Girard, Y., 1527
Gironacci, M.M., 507
Giuliani, L., 375
Glover, V., 763
Goldman, I.D., 1717
Gonzalez, F.J., 1077
Goodrow, M.H., 1599
Gopalakrishnakone, P., 49
Gorgun, G., 689
Gotoh, T., 1043
Grandjean, F., 823
Grandy, D.K., 859
Gray, S., 993
Greco, O., 265
Groen, H.J.M., 1989
Gruss-Fischer, T., 1325
Guarnieri, F., 2121
Gudbrandsen, O.A., 1127
Guigas, B., 1259
Guillon, C.D., 31
Guillouzo, A., 333, 745
Guimarães, J.A., 1589
Gullbo, J., 1491
Gupta, R.C., 1069

Gupta, R.P., 11
Gupta, S.K., 1949
Gwee, M.C.E., 49
Gwilt, P.R., 1209
Gyamfi, M.A., 1725
Gysling, K., 1343

Habermeyer, M., 659
Hacker, M., 1143
Haddad, J.J., 305
Hahn, M.E., 1405
Haining, R.L., 2111
Hait, W.N., 959
Hakam, A., 455
Hamilton, T.C., 1699
Hammock, B.D., 1599
Han, E.S., 495
Han, J.-K., 569
Hannaert, J.C., 1281
Haorah, J., 1229
Harel, A., 171
Harrer, J.M., 1739
Hasmann, M., 471
Havekes, L.M., 1755
Hayama, M., 1969
He, L., 1739
Heck, D.E., 31, 2001
Heck, N., 321
Heijn, M., 897
Hein, A., 909
Heindel, N.D., 31, 2001
Heinle, H., 1361
Helder, M.N., 1989
Hellstrand, M., 2151
Henthorn, D.C., 1619
Hermann, M., 515
Hestermann, E.V., 1405
Hesters, R., 755
Hickman, J.A., 1443
Hiddemann, W., 471
Higashi, Y., 777
Hiipakka, R.A., 1165
Hildebrand, M.-P., 1443
Hill, B.T., 251
Hippe, F., 659
Hiratsuka, A., 1817
Hlobilková, A., 1177
Ho, J.C.K., 951
Ho, J.W., 767
Hoekman, K., 897
Hoffmann, C., 871
Hojo, H., 1857
Hollender, P., 179
Holvoet, P., 321
Hon, W.-M., 1043
Hong, C., 1085
Horn, D., 1143
Hou, W.-C., 225
Houser, S.R., 1149
Howard, O.M.Z., 533
Hsieh, M.-T., 1641
Hsu, M.-F., 577
Hsu, S.-L., 1641
Huang, L.-J., 577, 1961
Hulscher, T.M., 733
Hurst, D.P., 2121
Huynh, R., 129
Hwang, Y.-I., 909

Idres, N., 933
Idris, I., 993
Igarashi, K., 523
IJzerman, A.P., 1119
Ipata, P.L., 117
Ireland, C.M., 707
Ishii, K., 977
Ishizaki, J., 777
Isobe, K., 977
Isobe, T., 1911
Itoh, Y., 777
Ivanov, A.I., 1287

Jabin, I., 31
Jabrane, W., 2159
Jacobson, E.L., 361
Jacobson, K.A., 871
Jacobson, M.K., 361
Jaeger, R., 945
Jagielska, E., 1371
Jakobs, S., 659
Jamison, J.M., 1773
Jansen, G., 105
Jarukamjorn, K., 2037
Jarzyna, R., 1371
Jaszlits, L., 1099
Jaxa-Chamiec, A.A., 1619
Jeannesson, P., 179
Jemnitz, K., 2137
Jenner, P., 1159
Ji, Y., 1397
Jiang, B., 1197
Jiménez-López, J.M., 1485
Jodrell, D.I., 607
Jönsson, K., 1875
Joseph, J.S., 49
Jung, Y.-J., 871

Kahn, O., 1863
Kaku, T., 1817
Kalkanidis, M., 833
Kamisuki, S., 421
Kamo, N., 81
Kang, B.Y., 1901
Kapuscinski, J., 625, 635
Kashlub, S., 57
Kathmann, I., 105
Kaufmann, K., 1507
Kawaguchi, T., 2075
Kawakami, Y., 977
Keating, E., 1565
Keelan, J.A., 409
Keller, J.M., 237
Kelly, J.A., 2197
Kelly, J.J., 797
Kenyon, S.H., 381
Kharbanda, K.K., 553, 697
Khoo, H.-E., 49
Khoo, H.E., 273
Khoo, H.-E., 1043
Khoo, H.E., 1113
Kiersztan, A., 1371
Kim, H.J., 647
Kim, H.-R., 41
Kim, J.-S., 41
Kim, M., 361, 871
Kim, M.-J., 569
Kim, S.G., 647, 871
Kim, T.S., 1901
Kirsten, E., 455
Kitani, K., 853
Klich, S., 1337
Kling, L., 725
Klonis, N., 833
Kloor, D., 809
Klotz, K.-N., 157
Kluza, J., 1443
Kobayashi, K., 889
Köhle, C., 123
Köhle, C.T., 1683
Kojima, F., 2043
Kolář, Z., 1177
Kolfschoten, G.M., 733
Komatsu, T., 2081
Konitz, A., 1653
Konopa, J., 1653
Korneeva, L.N., 1287
Kosugi, Y., 2043
Kovacs, P., 543
Kowluru, A., 1027, 2091
Krapcho, A.P., 1143
Kroemer, H.K., 1575
Krueger, S.K., 1353
Kulinski, A., 349
Kume, K., 1969
Kun, E., 455
Kunikowska, G., 1159
Kunz, C., 669
Kuo, S.-C., 577, 1961
Kuwayama, K., 81
Kwon, K.-B., 41
Kwon, O.S., 495

Labedzki, A., 2159
Lachuer, J., 1453
Lai, G.-M., 1709
Lallement, G., 755
Landucci, E.C.T., 65
Langouët, S., 745
Lankelma, J., 897
Lansiaux, A., 1443
Lapatto, R., 1297
Lapenna, D., 375
Lapouyade, R., 1863
Larsen-Su, S.A., 1353
Larsson, A.-K., 191
Larsson, R., 1491
Laskin, D.L., 2001
Laskin, J.D., 31, 2001
Lassota, P., 707
Lattard, V., 1453
Lawson, T.A., 1209
Le Ferrec, E., 333
Le Ridant, A., 1691
Lebon, F., 1863
Lebrun, P., 515
Ledecq, M., 1863
Lee, C.S., 495
Lee, C.-Y., 1961
Lee, E., 1315
Lee, K.-H., 1043
Lee, W.-R., 225
Lees, D.M., 149
Lehmann, S., 1875
Leira, F., 1979
Lennon, A.M., 163

Lenoir, M., 1241
Léonce, S., 1443
Leung, E., 157
Leung, Y.K., 767
Leverve, X., 1259
Levites, Y., 21
Levonen, A.-L., 1297
Li, C., 859
Li, H.-F., 199
Li, M., 859
Liao, C.-M., 1709
Liao, S., 1165
Lien, S., 191
Liepins, A., 1415
Liliemark, E., 259
Lin, H.-Y., 225
Lindup, W.E., 1287
Literáti Nagy, P., 921
Literati-Nagy, P., 1099
Liu, L., 217, 797
Liu, W.K., 951
Ljungquist, S., 259
Lo, Y.-K., 199
Lockridge, O., 2101
Logeart-Avramoglou, D., 129
Lokensgard, J.R., 1037
Loktionova, N.A., 1431
Lötsch, J., 1575
Lövborg, H., 1491
Low, K.S.Y., 1113
Lu, Y.-S., 1709
Lugnier, C., 1763
Luippold, G., 809

Ma, J., 1219
MacDonald, R.G., 1229
MacKenzie, R.S., 587
Macpherson, J.S., 607
Mad'arová, J., 1177
Magyarlaki, M., 921
Mahendran, R., 273
Mailliard, M.E., 697
Malaguti, C., 1979
Mancini, J.A., 1183, 1527
Mandel, S., 21
Mannervik, B., 191
Mansilla, S., 1251
Maor, G., 21
Maragos, W.F., 1499
Marangoni, S., 65
Marcellini, S., 1305
Marco, C., 1485
Mariano, T.M., 31, 2001
Marill, J., 933
Marko, D., 659, 669
Martel, F., 1565
Martey, C.A., 2001
Marthan, R., 1763
Martino, A., 967
Martinsson, P., 1491
Marunaka, Y., 1547
Marvin, K.W., 409
Masereel, B., 515
Maslenny, V.N., 1287
Masquelier, M., 2169
Masson, P., 1527
Master, S., 57
Mastroiacovo, P., 1305
Masue, T., 777
Matsubara, K., 909
Matsumura, F., 997
Matucci, R., 2063
Mauritz, R., 105
Mayer, B., 1137
Mazzon, E., 293, 785
McAllister, S.D., 2121
McDonald, M.C., 293
McKay, R.A., 1699
McVicker, D.L., 1229
Meckling-Gill, K.A., 717
Medvedev, A., 763
Meijer, C., 1989
Meijer, D.K.F., 1663
Melan, M.A., 587
Meldrum, E., 1619
Mellon, R.D., 533
Mendeleyeva, J., 455
Menezes, A., 2011
Merighi, S., 157
Merz, K.-H., 669
Meunier, A., 129
Michiels, C., 321
Miller, R.C., 2181
Mitchell, M.D., 409
Miura, T., 2069
Miyagi, C., 1019
Miyamoto, K.-i., 777
Miyata, M., 1077
Miyauchi, S., 81
Mizushina, Y., 399, 421
Modzelewska, A., 1371
Molema, G., 1663
Molinari, B., 1785
Monia, B.P., 1699
Moody, C.J., 1629
Moore, M.R., 693
Moreno-Aliaga, M.J., 997
Moretti, S., 1305
Morgan, N.G., 1027
Mori, K., 399
Mori, M., 1043
Morin, D., 1691
Morisseau, C., 1599
Mosca, L., 1305
Motoki, K., 1077
Mottino, A.D., 1553
Mouithys-Mickalad, A., 1863
Mudumba, S., 2011
Mühlbauer, B., 809
Muise, E.S., 1527
Mukherjee, D., 817
Mulder, G.J., 1119
Müller, A., 669
Müller-Beckmann, B., 725
Muna, Z.A., 1127
Munaut, C., 179
Münzel, P.A., 1683
Murakami, C., 399, 421
Muraoka, S., 2069
Muro, K., 1817
Murphy, M., 1219
Murray, M., 217

Nader, H.B., 65
Nagelkerke, J.F., 1119
Nakahata, N., 73
Nakai, T., 977
Nakajima, M., 2081
Nakamoto, M., 1851
Nakano, H., 1817
Nakatani, K., 73
Nambi, P., 1949
Nandigama, R.K., 865
Naraba, H., 2043
Naylor, M.A., 1629
Nebert, D.W., 1739
Nemeth, J., 921
Nemoto, N., 2037
Neri, P., 437
Neumann, J., 1069
Newman, J.W., 1599
Newman, R.G., 1629
Newton-Vinson, P., 865
Nguyen, Q.-A., 515
Nicolaou, A., 381
Nicosia, S., 1537
Nieminen, J.M., 1297
Niisato, N., 1547
Nikolaev, V.G., 1287
Nill, K., 123
Nilsson, C.L., 2151
Ninane, N., 321
Nirthanan, S., 49
Nishina, K., 1383
Nishiyama, T., 1817
Niwa, T., 1287
Noël, A., 179
Nohl, H., 1465
Noordhuis, P., 105
Nowell Harmon, K.W., 2121
Nuessler, V., 471
Nygren, P., 1491

O'Boyle, K.M., 2197
O'Dwyer, P.J., 1219, 1699
Ogawa, T., 1911
Ogura, K., 1817
Ohgami, M., 1851
Oh-ishi, S., 2043
Ohizumi, Y., 73
Ohno, S., 1969
Ohnuma, T., 1817
Ohta, K., 399, 421
Ohta, S., 909
Okada, Y., 1315
Olsson, J.M., 1875
Oonk, H.B., 1675
Opalka, J.R., 725
Oppenheim, J.J., 533
Ortmann, R., 909
Orzechowski, A., 1683
Osswald, H., 809
Osz, E., 1099
Otonkoski, T., 1297
Otsuguro, K.-i., 1911
Ott, S., 909
Ouedraogo, R., 515

Pan, B., 1699
Panasci, L.C., 1585
Panigalli, T., 1537
Pappas, I.S., 1009, 1919
Parameswaran, N., 1949
Parekh, H.K., 1149

Parent, M.B., 57
Pariente, J.A., 283
Park, B.-H., 41
Park, J.-W., 41
Parmentier, M., 1675
Pasanen, M., 429
Pasini, L., 967
Passey, D.K., 587
Patel, K.B., 1629
Pater, A., 1415
Patiag, D., 993
Paul, C., 1875
Paul, V., 2019
Pauvert, O., 1763
Paxton, J.W., 409
Payen, L., 333
Pearson, A.D.J., 207
Pedruzzi, E., 1241
Pegg, A.E., 1431
Pelka-Fleischer, R., 471
Pelkonen, O., 429
Pellegrino, J.M., 1553
Peluso, I., 1305
Peña, C., 507
Peng, W., 1389
Perego, P., 881
Pereira, C.B., 1353
Pérez-Tomás, R., 463
Perianin, A., 1241
Perluigi, M., 1305
Perretti, M., 1191
Peters, G.J., 105
Peters, S.O., 1337
Peterson, P.K., 1037
Pierce, K.L., 1797
Pierdomenico, S.D., 375
Pierré, A., 1443
Pierre, M., 163
Pillarisetti, K., 1949
Pinedo, H.M., 105, 733, 897
Piosik, J., 625, 635
Pipeleers, D.G., 1281
Pipino, S., 615
Pirisino, R., 2063
Pirotte, B., 515
Poels, J., 1675
Pogrebniak, A., 471
Poli, P., 967
Policastro, L., 1785
Polischouk, A., 259
Pon, D.J., 1527
Pons, N., 615
Portugal, J., 1251
Poyner, D., 2187
Praticò, D., 563
Prichard, R.K., 1061
Priebe, W., 1251, 1471
Priest, D.G., 105
Princen, H.M.G., 1755
Przewloka, T., 1471
Pyatakova, N., 763

Qasem, J.G., 361
Qin, G., 951
Quarck, R., 321
Quraishi, O., 1183

Rabloczky, G., 921, 1099
Racz, I., 1099
Raes, M., 321
Raffa, R.B., 1937
Raimondi, L., 2063
Rais, S., 1241
Ramamoorthy, Y., 2111
Ramauge, M., 163
Ramoneda, B.M., 463
Rapp, R.D., 31
Rasilainen, S., 1297
Ratinaud, M.-H., 823
Raung, S.-L., 577
Raunio, H., 429
Ravasi, S., 1537
Ravi, G., 871
Raz, A., 343
Reboud-Ravaux, M., 1863
Redfern, C.P.F., 207
Reed, K., 1219
Rees, J.R., 1383
Regan, J.W., 1797
Reggio, P.H., 2121
Reilly, P.E.B., 693
Renard, P., 321
Rho, H.-W., 41
Riendeau, D., 1183
Riley, R.J., 1683
Rivera, E., 1785
Rizzoli, V., 967
Robert, J., 823
Roberts, M.J., 361
Roggeman, C., 1273
Roma, M.G., 1553
Roman, Y., 1979
Rooseboom, M., 1843
Rosei, M.A., 1885
Rosowsky, A., 105
Rossi, C., 967
Rossini, G.P., 1979
Rössler, O.G., 1507
Rousseau, E., 1763
Rovati, G.E., 1537
Rubin, V.N., 1517
Rudy, D., 349
Ruenitz, P.C., 1517
Ruhanen, M., 429
Rustenbeck, I., 1921
Ryu, D.-G., 41

Sabbah, H.N., 1069
Sager, G., 945
Sakaguchi, K., 399, 421
Sakuma, T., 2037
Salerno, M., 1471
Salido, G.M., 283
Salles, B., 745
Salmaggi, A., 881
Salvail, D., 1763
Salvi, M., 247
Sánchez Pozzi, E.J., 1553
Santini, G., 1305
Sarnatskaya, V.V., 1287
Satarug, S., 693
Sato, H., 1851
Sato, T., 1969
Sautebin, L., 785
Savineau, J.P., 1763
Scheffer, G.L., 333
Schlenke, P., 1337
Schmidt, K., 1137
Schopfer, L.M., 2101
Schornagel, J.H., 105
Schrier, S.M., 1119
Schulingkamp, R.J., 1937
Schulze-Osthoff, K., 1361
Schwager, T.L., 2055
Schwarz, J., 909
Sedel, L., 129
Segovia, J.L., 1485
Sellers, E.M., 2111
Sergooris, J., 515
Serraino, I., 293, 785
Severina, I., 763
Sharina, I.G., 1717
Shen, S.-C., 225
Shertzer, H.G., 1739
Shi, Z.Q., 1579
Shibuya, S., 977
Shimada, N., 889
Shimada, T., 777
Shin, Y.K., 495
Shubert, K.A., 553
Sicsic, S., 1863
Sies, H., 2145
Simpkins, H., 1149
Składanowski, A., 1653
Skorve, J., 1127
Slator, G.R., 2197
Ślusarski, B., 1653
Smit, C., 1663
Smith, P.B., 1941
Smyth, J.F., 607
Soars, M.G., 1683
Söderhäll, S., 259
Solis, W.A., 1739
Song, J.H., 495
Song, Y.C., 1423
Sorrell, M.F., 553
Sparfel, L., 745
Spencer, S.D., 1937
Sperker, B., 1575
Speziale, E., 507
Stahl, W., 2145
Stegeman, J.J., 1405
Sterin-Speziale, N., 507
Stern, P.H., 523
Stillitano, F., 2063
Stoetzer, O.J., 471
Stolze, K., 1465
Storch, A., 909
Strada, S.J., 797
Stratford, M.R.L., 265, 1629
Sugawara, F., 399, 421
Sugidachi, A., 1911
Suh, N., 2111
Sümegi, B., 921
Sumegi, B., 1099
Summers, J.L., 1773
Sundkvist, E., 945
Sung, J.M.L., 1113
Supattapone, S., 1383
Surya, A., 1949
Suzuki, Y., 485
Swain, M.G., 1191
Swann, E., 1629
Swedmark, S., 1683

Szendrei, L., 543

't Hoen, P.A.C., 1843
Tacchini, L., 139
Taghibiglou, C., 349
Taira, J., 1019
Takahashi, N., 1851
Takekoshi, K., 977
Takemura, K., 1315
Takikawa, H., 399
Tamura, E., 1077
Tanaka, T., 853
Tang, S.-C., 1415
Tao, Q., 2121
Taper, H.S., 1773
Tarasova, N., 669
Tateoka, R., 81
Tatidis, L., 2169
Testa, B., 1691
Tetri, S., 429
Thiel, G., 1507
Thiemermann, C., 293
Thompson, W.J., 797
Threadgill, M., 293
Tian, N., 1629
Tilby, M.J., 1807
Tillement, J.-P., 1691
Tilley, L., 833
Timbrell, J.A., 381
Tingle, M.D., 409
Tjia, J., 1287
Tkalec, L., 1527
Toader, V., 1397
Toninello, A., 247
Torfs, H., 1675
Tory, K., 1099
Tosaki, A., 543
Toyama, M.H., 65
Trinquart, Y., 333
Tsai, T.-H., 1641
Tsao, L.-T., 1961
Tsiftsoglou, A.S., 1009, 1919
Tsuchiya, Y., 1857
Tsuda, Y., 1315
Tuma, D.J., 553, 697
Turoczi, T., 543
Tyndale, R.F., 2111

Udilova, N., 1465
Ueda-Kawamitsu, H., 1209
Ueno, A., 2043
Ueno, T., 485
Urashima, K., 889
Urbano, A., 689
Urbenjapol, S., 693
Uyeda, K., 2075

van Balen, G.P., 1691
van Berkel, T.J.C., 1843
van Hensbergen, Y., 897
Van Iderstine, S.C., 349
Van Log, T., 1675
Vande Gucht, P., 1273
Vanderheyden, P.M.L., 1273
Vanin, A.F., 485
Varani, K., 157
Vardi, P., 171
Varker, K.A., 597
Vassart, G., 1675
Vassil, A., 959
Vauquelin, G., 1273
Vayssade, M., 1609
Veal, G.J., 207
Vecsernyes, M., 543
Veggi, L.M., 1553
Velez-Pardo, C., 677
Vemavarapu, L., 797
Vereczkey, L., 2137
Veres, Z., 2137
Vermeulen, N.P.E., 1843
Vetrano, A.M., 31, 2001
Vieytes, M.R., 1979
Viitala, P., 429
Villamarín, S., 1251
Vitols, S., 2169
Vizirianakis, I.S., 1009, 1919
Vojnovic, B., 1629
Volger, O.L., 1755
von Angerer, E., 1177
Von Richter, O., 1683

Wagner, B., 659
Wagner, T., 1337
Wan, W., 1481
Wang, J.-P., 577, 1961
Wang, Y., 1717
Wang, Z., 1197
Wardman, P., 265, 1629
Warner, F.J., 2181
Watabe, T., 1817
Watanabe, A.M., 1069
Waterfield, C.J., 381
Wattez, N., 1443
Weerasinghe, P., 1415
Wei, C.-L., 1043
Weingarten, P., 859
Wergedahl, H., 1127
Wheelock, C.E., 1599
Whittemore, M.S., 31, 2001
Wiernsperger, N., 1259
Wiese, T.E., 1517
Williams, C.L., 597
Williams, D.E., 1353
Williams, D.J., 693
Willmore, E., 1807
Wirth, T., 1507
Witt-Enderby, P.A., 587
Wolf, H.-U., 909
Wolf, S.C., 1361
Wondrak, G.T., 361
Woo, J.-T., 523
Wood, E.G., 149
Wu, S.-N., 199
Wyatt, T.A., 553

Xie, K., 11
Xie, Y., 1893
Xu, A., 1389
Xu, D., 1949
Xu, S., 985

Yamaguchi, M., 1857
Yamashita, H., 2075
Yamazaki, H., 2081
Yamazaki, M., 1851
Yamazoe, Y., 1077
Yang, J.-M., 959
Yang, J.-Y., 41
Yang, L., 533
Yang, L.-L., 225
Yang, Q., 1893
Yang, S.-E., 1641
Yang, X., 1415
Yao, K.-S., 1699
Yap, L.L., 273
Yasuda, H., 73
Yasumoto, T., 1979
Yeh, K.-H., 1423
Yeh, P.Y., 1423
Yeh, P.-Y., 1709
Yokogawa, K., 777
Yokoi, T., 2081
Yokozawa, T., 853
Yoo, S.-J., 41
Yool, A.J., 1797
Yoshida, H., 399, 421
Yoshimura, M., 2043
Yoshimura, T., 485
Youdim, M.B.H., 21
Youn, Y.C., 495
Yu, A.-m., 2111
Yuan, C.-S., 1579
Yueh, M.-F., 1353
Yushko, L.A., 1287

Zdunek, M., 625, 635
Zhang, H.-Z., 1165
Zhang, J.-G., 751
Zhang, Y., 273
Zhao, R., 1717
Zhou, Q.-Y., 859
Zhu, B., 797
Zhu, B.T., 985
Zhu, J., 1499
Zierz, S., 725
Zingali, R.B., 1589
Zunino, F., 881

ELSEVIER

Biochemical Pharmacology 63 (2002) 2229–2261

Biochemical Pharmacology

Subject index Volume 63

ACAT
Intracellular mechanisms mediating the inhibition of apoB-containing lipoprotein synthesis and secretion in HepG2 cells by avasimibe (CI-1011), a novel acyl-coenzyme A: cholesterol acyltransferase (ACAT) inhibitor, 349
Acetoacetyl-CoA synthetase
Effects of streptozotocin-induced diabetes on acetoacetyl-CoA synthetase activity in rats, 1851
Acetylcholine
Biochemical and pharmacological characterization of the venom of the black scorpion *Heterometrus spinifer*, 49
Acetyl-CoA carboxylase
Effects of 5-iodotubercidin on hepatic fatty acid metabolism mediated by the inhibition of acetyl-CoA carboxylase, 1997
Acetylleucine chloromethyl ketone
Degradation of glyceraldehyde-3-phosphate dehydrogenase induced by acetylleucine chloromethyl ketone in U937 cells, 1857
N^8-Acetylspermidine
Differentiation of PC12 cells induced by N^8-acetylspermidine and by N^8-acetylspermidine deacetylase inhibition, 2011
N^8-Acetylspermidine deacetylase
Differentiation of PC12 cells induced by N^8-acetylspermidine and by N^8-acetylspermidine deacetylase inhibition, 2011
Acronycine
Induction of apoptosis in HL-60 leukemia and B16 melanoma cells by the acronycine derivative S23906-1, 1443
Actin-binding protein 280
Association of dopamine D_3 receptors with actin-binding protein 280 (ABP-280), 859
Acutiaporberine
Apoptosis of a human non-small cell lung cancer (NSCLC) cell line, PLA-801, induced by acutiaporberine, a novel bisalkaloid derived from *Thalictrum acutifolium* (Hand.-Mazz.) Boivin, 1389
Acyl-CoA:estradiol acyltransferase
Effect of clofibrate administration on the esterification and deesterification of steroid hormones by liver and extrahepatic tissues in rats, 985
Adenosine
Tissue levels of *S*-adenosylhomocysteine in the rat kidney: effects of ischemia and homocysteine, 809
Apoptosis induced by extracellular ATP in the mouse neuroblastoma cell line N1E-115: studies on involvement of P2 receptors and adenosine, 1119
Adenosine A_3 receptor
Binding thermodynamics at the human A_3 adenosine receptor, 157
Adenosine receptor
p53-Independent induction of Fas and apoptosis in leukemic cells by an adenosine derivative, Cl-IB-MECA, 871
S-Adenosylhomocysteine
Tissue levels of *S*-adenosylhomocysteine in the rat kidney: effects of ischemia and homocysteine, 809
S-Adenosylmethionine
Tissue levels of *S*-adenosylhomocysteine in the rat kidney: effects of ischemia and homocysteine, 809
Adenylyl cyclase
Molecular cloning and pharmacological characterization of bovine calcitonin receptor-like receptor from bovine aortic endothelial cells, 1949
Adipocyte differentiation
Effects of 1,1,1-trichloro-2,2-bis(*p*-chlorophenyl)-ethane (*p*,*p*′-DDT) on 3T3-L1 and 3T3-F442A adipocyte differentiation, 997
β-Adrenergic
Modulation of the β-adrenergic receptor system of vascular smooth muscle cells *in vitro* and *in vivo* by chronically elevated endothelin-1 levels, 1361
β-Adrenergic agonist
Effects of Ca^{2+} channel blockers on amiloride-sensitive Na^+ permeable channels and Na^+ transport in fetal rat alveolar type II epithelium, 1547
Adrenomedullin
Inhibitory effect of adrenomedullin on basal and tumour necrosis factor alpha-stimulated endothelin-1 synthesis in bovine aortic endothelial cells is independent of cyclic AMP, 149
Molecular cloning and pharmacological characterization of bovine calcitonin receptor-like receptor from bovine aortic endothelial cells, 1949
Aequorin
Analysis of C-terminally substituted tachykinin-like peptide agonists by means of aequorin-based luminescent assays for human and insect neurokinin receptors, 1675
Aflatoxin B_1
Investigations on the effects of oltipraz on the nucleotide excision repair in the liver, 745
Agonist
Analysis of C-terminally substituted tachykinin-like peptide agonists by means of aequorin-based luminescent assays for human and insect neurokinin receptors, 1675
Agonist–antagonist discrimination
Binding thermodynamics at the human A_3 adenosine receptor, 157
Ah receptor
Coordinate regulation of UDP-glucuronosyltransferase UGT1A6 induction by 3-methylcholanthrene and multidrug resistance protein MRP2 expression by dexamethasone in primary rat hepatocytes, 2137
AIDS
Metal-organic compounds: a new approach for drug discovery. *N*1-(4-methyl-2-pyridyl)-2,3,6-trimethoxybenzamide copper(II) complex as an inhibitor of human immunodeficiency virus 1 protease, 1863
Akt
Mechanisms of apoptosis by the tyrphostin AG957 in hematopoietic cells, 689
Albumin
Effect of protein-bound uraemic toxins on the thermodynamic characteristics of human albumin, 1287
Alcoholic liver disease
Effect of malondialdehyde–acetaldehyde–protein adducts on the protein kinase C-dependent secretion of urokinase-type plasminogen activator in hepatic stellate cells, 553

PII: S0006-2952(02)01123-1

Alcoholism
Tetrahydroisoquinoline derivatives of enkephalins: synthesis and properties, 1893
Alkaloid sanguinarine
The alkaloid sanguinarine is effective against multidrug resistance in human cervical cells *via* bimodal cell death, 1415
Alkylating agents
Stem cell toxicity of oxazaphosphorine metabolites in comparison to their antileukemic activity, 1337
Interaction of mammalian O^6-alkylguanine-DNA alkyltransferases with O^6-benzylguanine, 1431
Alkylguanine alkyltransferase
Biochemical changes associated with a multidrug-resistant phenotype of a human glioma cell line with temozolomide-acquired resistance, 1219
Alkyltransferase
Interaction of mammalian O^6-alkylguanine-DNA alkyltransferases with O^6-benzylguanine, 1431
Alloxan
Sensitivity of HaCat keratinocytes to diabetogenic toxins, 171
Alzheimer's disease
Alzheimer's disease and oxygen radicals: new insights, 563
Amines
Phentermine inhibition of recombinant human liver monoamine oxidases A and B, 865
3-Aminobenzamide
Modulation of pyridyl cyanoguanidine (CHS 828) induced cytotoxicity by 3-aminobenzamide in U-937 GTB cells, 1491
5-Aminoisoquinolinone
Effects of 5-aminoisoquinolinone, a water-soluble, potent inhibitor of the activity of poly (ADP-ribose) polymerase, in a rodent model of lung injury, 293
Aminopeptidase N
A doxorubicin–CNGRC-peptide conjugate with prodrug properties, 897
2-Aminopurine
Lack of association between CYP2A5 induction and apoptosis in mouse primary hepatocytes, 429
AMP
Effects of 5-iodotubercidin on hepatic fatty acid metabolism mediated by the inhibition of acetyl-CoA carboxylase, 1997
Amphibian
Structure–activity studies of bufokinin, substance P and their C-terminal fragments at bufokinin receptors in the small intestine of the cane toad, *Bufo marinus*, 217
Amyloid
Alzheimer's disease and oxygen radicals: new insights, 563
Amytal
Effect of the new matrix metalloproteinase inhibitor RO-28-2653 on mitochondrial function, 725
Angiotensin AT_1 receptor
Distinct binding properties of the AT_1 receptor antagonist [^{3}H]candesartan to intact cells and membrane preparations, 1273
Angiotensin-(1–7)
Enhancement of phosphatidylcholine biosynthesis by angiotensin-(1–7) in the rat renal cortex, 507
Anorectics
Phentermine inhibition of recombinant human liver monoamine oxidases A and B, 865
Anoxia
3-Isobutyl-1-methylxanthine (IBMX) sensitizes cardiac myocytes to anoxia, 2055
Antagonist
p53-Independent induction of Fas and apoptosis in leukemic cells by an adenosine derivative, Cl-IB-MECA, 871
Anthelmintic
A glutamate-gated chloride channel subunit from *Haemonchus contortus*: Expression in a mammalian cell line, ligand binding, and modulation of anthelmintic binding by glutamate, 1061
Anthracenedione
Characterization of anthracenediones and their photoaffinity analogs, 1143
Anthracycline
Characterization of anthracenediones and their photoaffinity analogs, 1143
Anthracyclines
Matrix and serine protease expression during leukemic cell differentiation induced by aclacinomycin and all-*trans*-retinoic acid, 179
Anti-apoptotic proteins
Biochemical changes associated with a multidrug-resistant phenotype of a human glioma cell line with temozolomide-acquired resistance, 1219
Antiblastic drugs
Bleomycin genotoxicity and amifostine (WR-2721) cell protection in normal leukocytes vs. K562 tumoral cells, 967
Antibodies
Pharmacological approaches to prion research, 1383
Anticancer drug
Induction of apoptosis in HL-60 leukemia and B16 melanoma cells by the acronycine derivative S23906-1, 1443
Anticonvulsant
Evidence for the involvement of L-citrulline but not nitric oxide in the proconvulsant action of the precursor L-arginine on picrotoxin-induced convulsions in rats, 2019
Antidepressants
Neuronal cell death induced by antidepressants: lack of correlation with Egr-1, NF-κB and extracellular signal-regulated protein kinase activation, 1507
Antifolate resistance
Multiple mechanisms of resistance to methotrexate and novel antifolates in human CCRF-CEM leukemia cells and their implications for folate homeostasis, 105
Antileukemic activity
Stem cell toxicity of oxazaphosphorine metabolites in comparison to their antileukemic activity, 1337
Antimicrobial
Antimicrobial effect of resveratrol on dermatophytes and bacterial pathogens of the skin, 99
Antimicrotubule agents
Involvement of microtubules and mitochondria in the antagonism of arsenic trioxide on paclitaxel-induced apoptosis, 1831
Antioxidant
The involvement of L-γ-glutamyl-L-cysteinyl-glycine (glutathione/GSH) in the mechanism of redox signaling mediating $MAPK^{p38}$-dependent regulation of pro-inflammatory cytokine production, 305
Cytoprotective role of taurine in a renal epithelial cell culture model, 1051
Dose-dependent cysteine-mediated protection of insulin-producing cells from damage by hydrogen peroxide, 1297
Modulation of apoptosis and improved redox metabolism with the use of a new antioxidant formula, 1305
Antioxidant properties of Thonningianin A, isolated from the African medicinal herb, *Thonningia sanguinea*, 1725
Antioxidant enzymes
The distribution of copper, zinc- and manganese-superoxide dismutase, and glutathione peroxidase messenger ribonucleic acid in rat basal ganglia, 1159
Antiprotease
Metal-organic compounds: a new approach for drug discovery. *N*1-(4-methyl-2-pyridyl)-2,3,6-trimethoxybenzamide copper(II) complex as an inhibitor of human immunodeficiency virus 1 protease, 1863
Antisense
Reversal of cisplatin resistance in human ovarian cancer cell lines by a c-*jun* antisense oligodeoxynucleotide (ISIS 10582): evidence for the role of transcription factor overexpression in determining resistant phenotype, 1699

Antisense oligodeoxynucleotide
Sequence and chemistry requirements for a novel aptameric oligonucleotide inhibitor of EGF receptor tyrosine kinase activity, 2187
Antitumor agent
Inhibition of tubulin polymerization by vitilevuamide, a bicyclic marine peptide, at a site distinct from colchicine, the vinca alkaloids, and dolastatin 10, 707
Antitumor drug
Apoptosis of a human non-small cell lung cancer (NSCLC) cell line, PLA-801, induced by acutiaporberine, a novel bisalkaloid derived from *Thalictrum acutifolium* (Hand.-Mazz.) Boivin, 1389
AP-1
Activation of transcription factors by drugs inducing oxidative stress in rat liver, 139
APAH
Differentiation of PC12 cells induced by N^8-acetylspermidine and by N^8-acetylspermidine deacetylase inhibition, 2011
Apical and basolateral transport
Influence of *t*-butylhydroquinone and β-naphthoflavone on formation and transport of 4-methylumbelliferone glucuronide in Caco-2/TC-7 cell monolayers, 123
Apical uptake
Uptake of ^{3}H-1-methyl-4-phenylpyridinium (^{3}H-MPP$^+$) by human intestinal Caco-2 cells is regulated by phosphorylation/dephosphorylation mechanisms, 1565
APO-1
p53-Independent induction of Fas and apoptosis in leukemic cells by an adenosine derivative, Cl-IB-MECA, 871
Apolipoprotein B
Intracellular mechanisms mediating the inhibition of apoB-containing lipoprotein synthesis and secretion in HepG2 cells by avasimibe (CI-1011), a novel acyl-coenzyme A: cholesterol acyltransferase (ACAT) inhibitor, 349
Apoptosis
Induction of apoptosis by diallyl disulfide through activation of caspase-3 in human leukemia HL-60 cells, 41
Sensitivity of HaCat keratinocytes to diabetogenic toxins, 171
Wogonin and fisetin induce apoptosis in human promyeloleukemic cells, accompanied by a decrease of reactive oxygen species, and activation of caspase 3 and Ca^{2+}-dependent endonuclease, 225
Selective inhibition of the activities of both eukaryotic DNA polymerases and DNA topoisomerases by elenic acid, 399
Actions of derivatives of dehydroaltenusin, a new mammalian DNA polymerase α-specific inhibitor, 421
Lack of association between CYP2A5 induction and apoptosis in mouse primary hepatocytes, 429
In vitro induction of apoptosis vs. necrosis by widely used preservatives: 2-phenoxyethanol, a mixture of isothiazolinones, imidazolidinyl urea and 1,2-pentanediol, 437
Activation of protein kinase C for protection of cells against apoptosis induced by the immunosuppressor prodigiosin, 463
Modulation of apoptosis by mitochondrial uncouplers: apoptosis-delaying features despite intrinsic cytotoxicity, 471
Monoamine neurotoxins-induced apoptosis in lymphocytes by a common oxidative stress mechanism: involvement of hydrogen peroxide (H_2O_2), caspase-3, and nuclear factor kappa-B (NF-κB), p53, c-Jun transcription factors, 677
Mechanisms of apoptosis by the tyrphostin AG957 in hematopoietic cells, 689
Variation in the kinetics of caspase-3 activation, Bcl-2 phosphorylation and apoptotic morphology in unselected human ovarian cancer cell lines as a response to docetaxel, 733
Fas/CD95-mediated apoptosis in human glioblastoma cells: a target for sensitisation to topoisomerase I inhibitors, 881
Jolkinolide B induces neuroendocrine differentiation of human prostate LNCaP cancer cell line, 951
GTP-binding proteins in cell survival and demise: the emerging picture in the pancreatic β-cell, 1027
Bcl-2 family-mediated apoptotic effects of 3,3′-diindolylmethane (DIM) in human breast cancer cells, 1085
Apoptosis induced by extracellular ATP in the mouse neuroblastoma cell line N1E-115: studies on involvement of P2 receptors and adenosine, 1119
Modulation of apoptosis and improved redox metabolism with the use of a new antioxidant formula, 1305
Apoptosis of a human non-small cell lung cancer (NSCLC) cell line, PLA-801, induced by acutiaporberine, a novel bisalkaloid derived from *Thalictrum acutifolium* (Hand.-Mazz.) Boivin, 1389
The alkaloid sanguinarine is effective against multidrug resistance in human cervical cells *via* bimodal cell death, 1415
Induction of apoptosis in HL-60 leukemia and B16 melanoma cells by the acronycine derivative S23906-1, 1443
Modulation of pyridyl cyanoguanidine (CHS 828) induced cytotoxicity by 3-aminobenzamide in U-937 GTB cells, 1491
Down-modulation of Bcl-X_L, release of cytochrome *c* and sequential activation of caspases during honokiol-induced apoptosis in human squamous lung cancer CH27 cells, 1641
Involvement of microtubules and mitochondria in the antagonism of arsenic trioxide on paclitaxel-induced apoptosis, 1831
Characterization of F-actin depolymerization as a major toxic event induced by pectenotoxin-6 in neuroblastoma cells, 1979
Aptamer
Sequence and chemistry requirements for a novel aptameric oligonucleotide inhibitor of EGF receptor tyrosine kinase activity, 2187
Arachidonate
Inhibition of inducible prostaglandin E_2 synthase by 15-deoxy-$\Delta^{12,14}$-prostaglandin J_2 and polyunsaturated fatty acids, 1183
Arachidonic acid
Protein kinase Cα-dependent increase in Ca^{2+}-independent phospholipase A_2 in membranes and arachidonic acid liberation in zymosan-stimulated macrophage-like P388D_1 cells, 1969
Arginase I and II
Induction of arginase II in livers of bile duct-ligated rats, 1043
Arginine metabolism
Induction of arginase II in livers of bile duct-ligated rats, 1043
Arsenic trioxide
Involvement of microtubules and mitochondria in the antagonism of arsenic trioxide on paclitaxel-induced apoptosis, 1831
Aryl hydrocarbon receptor
Serum withdrawal leads to reduced aryl hydrocarbon receptor expression and loss of cytochrome P4501A inducibility in PLHC-1 cells, 1405
ASBT
Dapsone-induced cholestasis and impairment of bile salt output in the rat, 1553
Ascorbic acid
Protection by ascorbic acid from denaturation and release of cytochrome *c*, alteration of mitochondrial membrane potential and activation of multiple caspases induced by H_2O_2, in human leukemia cells, 1325
ASK1
Role of redox status on the activation of mitogen-activated protein kinase cascades by NSAIDs, 163
Asthma
Comparison of inhibition of ovalbumin-induced bronchoconstriction in guinea pigs and *in vitro* inhibition of tumor necrosis factor-α formation with phosphodiesterase 4 (PDE4) selective inhibitors, 1527
Pharmacological differences among $CysLT_1$ receptor antagonists with respect to LTC_4 and LTD_4 in human lung parenchyma, 1537
Astrocytes
Role of redox status on the activation of mitogen-activated protein kinase cascades by NSAIDs, 163
Atherogenesis
Vanadyl as a catalyst of human lipoprotein oxidation, 375
Atherosclerosis
Inhibition of rat lipoprotein oxidation after tetradecylthioacetic acid feeding, 1127

HOE 402 lowers serum cholesterol levels by reducing VLDL-lipid production, and not by induction of the LDL receptor, and reduces atherosclerosis in wild-type and LDL receptor-deficient mice, 1755
ATP
Apoptosis induced by extracellular ATP in the mouse neuroblastoma cell line N1E-115: studies on involvement of P2 receptors and adenosine, 1119
Modulation of pyridyl cyanoguanidine (CHS 828) induced cytotoxicity by 3-aminobenzamide in U-937 GTB cells, 1491
ATP/ADP ratio
3-Isobutyl-1-methylxanthine (IBMX) sensitizes cardiac myocytes to anoxia, 2055
ATRA
Matrix and serine protease expression during leukemic cell differentiation induced by aclacinomycin and all-*trans*-retinoic acid, 179
Atrial natriuretic peptide
Effect of isatin on nitric oxide-stimulated soluble guanylate cyclase from human platelets, 763
Atypical paclitaxel resistance
Overexpression of sorcin, a calcium-binding protein, induces a low level of paclitaxel resistance in human ovarian and breast cancer cells, 1149
Aurintricarboxylic acid
Modulation of apoptosis by mitochondrial uncouplers: apoptosis-delaying features despite intrinsic cytotoxicity, 471
Autoschizis
Autoschizis: a novel cell death, 1773
Avasimibe
Intracellular mechanisms mediating the inhibition of apoB-containing lipoprotein synthesis and secretion in HepG2 cells by avasimibe (CI-1011), a novel acyl-coenzyme A: cholesterol acyltransferase (ACAT) inhibitor, 349

B22
Differentiation-dependent repression of c-*myc*, *B22*, *COX II* and *COX IV* genes in murine erythroleukemia (MEL) cells, 1009
Bacillus Calmette-Guérin
The signalling pathway for BCG-induced interleukin-6 production in human bladder cancer cells, 273
BAD
Mechanisms of apoptosis by the tyrphostin AG957 in hematopoietic cells, 689
Bad
Down-modulation of Bcl-X_L, release of cytochrome *c* and sequential activation of caspases during honokiol-induced apoptosis in human squamous lung cancer CH27 cells, 1641
Basal ganglia
The distribution of copper, zinc- and manganese-superoxide dismutase, and glutathione peroxidase messenger ribonucleic acid in rat basal ganglia, 1159
Bax
Wogonin and fisetin induce apoptosis in human promyeloleukemic cells, accompanied by a decrease of reactive oxygen species, and activation of caspase 3 and Ca^{2+}-dependent endonuclease, 225
Variation in the kinetics of caspase-3 activation, Bcl-2 phosphorylation and apoptotic morphology in unselected human ovarian cancer cell lines as a response to docetaxel, 733
Bcl-2 family-mediated apoptotic effects of 3,3′-diindolylmethane (DIM) in human breast cancer cells, 1085
Bcl-2
Variation in the kinetics of caspase-3 activation, Bcl-2 phosphorylation and apoptotic morphology in unselected human ovarian cancer cell lines as a response to docetaxel, 733
Bcl-2 family-mediated apoptotic effects of 3,3′-diindolylmethane (DIM) in human breast cancer cells, 1085
Bcl-X_L
Down-modulation of Bcl-X_L, release of cytochrome *c* and sequential activation of caspases during honokiol-induced apoptosis in human squamous lung cancer CH27 cells, 1641
BCNU
The polymorphic human glutathione transferase T1-1, the most efficient glutathione transferase in the denitrosation and inactivation of the anticancer drug 1,3-bis(2-chloroethyl)-1-nitrosourea, 191
In vitro pharmacokinetics and pharmacodynamics of 1,3-bis(2-chloroethyl)-1-nitrosourea (BCNU), 1209
O^6-Benzylguanine
Interaction of mammalian O^6-alkylguanine-DNA alkyltransferases with O^6-benzylguanine, 1431
Berberine
Involvement of p38 mitogen-activated protein kinase in the induction of interleukin-12 p40 production in mouse macrophages by berberine, a benzodioxoloquinolizine alkaloid, 1901
Bicalutamide
The effects of natural ligands of hormone receptors and their antagonists on telomerase activity in the androgen sensitive prostatic cancer cell line LNCaP, 1177
Bile salt metabolism
Dapsone-induced cholestasis and impairment of bile salt output in the rat, 1553
Bile salt pool
Dapsone-induced cholestasis and impairment of bile salt output in the rat, 1553
Bile salt secretion
Dapsone-induced cholestasis and impairment of bile salt output in the rat, 1553
Bilirubin degradation
Bilirubin and uroporphyrinogen oxidation by induced cytochrome P4501A and cytochrome P4502B. Role of polyhalogenated biphenyls of different configuration, 615
Binding thermodynamics
Binding thermodynamics at the human A_3 adenosine receptor, 157
Effect of protein-bound uraemic toxins on the thermodynamic characteristics of human albumin, 1287
Biosynthesis
Increased rate of glutathione synthesis from cystine in drug-resistant MCF-7 cells, 843
Blood pressure
Associations between human liver and kidney cadmium content and immunochemically detected CYP4A11 apoprotein, 693
Structural refinement of inhibitors of urea-based soluble epoxide hydrolases, 1599
BM 208
In vitro and *in vivo* effects of new insulin releasing agents, 515
BM 225
In vitro and *in vivo* effects of new insulin releasing agents, 515
Boldine
Protective effect of boldine on dopamine-induced membrane permeability transition in brain mitochondria and viability loss in PC12 cells, 495
Bone resorption
Effects of a selective cyclooxygenase-2 inhibitor, celecoxib, on bone resorption and osteoclastogenesis *in vitro*, 523
Bovine calcitonin receptor-like receptor
Molecular cloning and pharmacological characterization of bovine calcitonin receptor-like receptor from bovine aortic endothelial cells, 1949
Bradykinin B_1 receptor
Effects of dexamethasone and protein kinase C inhibitors on the induction of bradykinin B_1 mRNA and the bradykinin B_1 receptor-mediated contractile response in isolated rat ileum, 2043
Brain mitochondria
Protective effect of boldine on dopamine-induced membrane permeability transition in brain mitochondria and viability loss in PC12 cells, 495
Breast cancer
Increased rate of glutathione synthesis from cystine in drug-resistant MCF-7 cells, 843

Bcl-2 family-mediated apoptotic effects of 3,3′-diindolylmethane (DIM) in human breast cancer cells, 1085
Breast carcinoma cells
Overexpression of sorcin, a calcium-binding protein, induces a low level of paclitaxel resistance in human ovarian and breast cancer cells, 1149
Bronchoconstriction
Comparison of inhibition of ovalbumin-induced bronchoconstriction in guinea pigs and *in vitro* inhibition of tumor necrosis factor-α formation with phosphodiesterase 4 (PDE4) selective inhibitors, 1527
t-Butylhydroquinone
Influence of *t*-butylhydroquinone and β-naphthoflavone on formation and transport of 4-methylumbelliferone glucuronide in Caco-2/TC-7 cell monolayers, 123

C-1311
Intercalation of imidazoacridinones to DNA and its relevance to cytotoxic and antitumor activity, 1653
C6 rat glioma cells
Inhibition of cyclooxygenase and prostaglandin E_2 synthesis by γ-mangostin, a xanthone derivative in mangosteen, in C6 rat glioma cells, 73
C/EBPα
Effects of 1,1,1-trichloro-2,2-bis(*p*-chlorophenyl)-ethane (*p,p′*-DDT) on 3T3-L1 and 3T3-F442A adipocyte differentiation, 997
Ca^{2+}
The effect of methylglyoxal-bis(guanylhydrazone) on mitochondrial Ca^{2+} fluxes, 247
Ca^{2+} oscillations
Role of mitochondria in Ca^{2+} oscillations and shape of Ca^{2+} signals in pancreatic acinar cells, 283
Ca^{2+}/calmodulin-mediated pathways
Uptake of ^{3}H-1-methyl-4-phenylpyridinium (^{3}H-MPP$^+$) by human intestinal Caco-2 cells is regulated by phosphorylation/dephosphorylation mechanisms, 1565
Ca^{2+}-independent phospholipase A_2
Protein kinase Cα-dependent increase in Ca^{2+}-independent phospholipase A_2 in membranes and arachidonic acid liberation in zymosan-stimulated macrophage-like P388D_1 cells, 1969
Caco-2 cells
Fluorescein uptake by a monocarboxylic acid transporter in human intestinal Caco-2 cells, 81
Caco-2/TC-7 cells
Influence of *t*-butylhydroquinone and β-naphthoflavone on formation and transport of 4-methylumbelliferone glucuronide in Caco-2/TC-7 cell monolayers, 123
Cadmium
Associations between human liver and kidney cadmium content and immunochemically detected CYP4A11 apoprotein, 693
Caffeine
Differences in caffeine and paraxanthine metabolism between human and murine CYP1A2, 2159
Calcitonin gene-related peptide
Molecular cloning and pharmacological characterization of bovine calcitonin receptor-like receptor from bovine aortic endothelial cells, 1949
Calcitonin receptor-like receptor
Inhibitory effect of adrenomedullin on basal and tumour necrosis factor alpha-stimulated endothelin-1 synthesis in bovine aortic endothelial cells is independent of cyclic AMP, 149
Calcium
Alterations in cellular Ca^{2+} and free iron pool by sulfur amino acid deprivation: the role of ferritin light chain down-regulation in prooxidant production, 647
Analysis of C-terminally substituted tachykinin-like peptide agonists by means of aequorin-based luminescent assays for human and insect neurokinin receptors, 1675
Differential regulation of Ca^{2+}-dependent Cl^- currents by FP prostanoid receptor isoforms in *Xenopus* oocytes, 1797
Calcium independent
Overexpression of sorcin, a calcium-binding protein, induces a low level of paclitaxel resistance in human ovarian and breast cancer cells, 1149
Calcium mobilization
Regulatory effects of deoxycholic acid, a component of the anti-inflammatory traditional Chinese medicine Niuhuang, on human leukocyte response to chemoattractants, 533
Calorimetry
The modulation of the DNA-damaging effect of polycyclic aromatic agents by xanthines. Part I. Reduction of cytostatic effects of quinacrine mustard by caffeine, 625
The modulation by xanthines of the DNA-damaging effect of polycyclic aromatic agents. Part II. The stacking complexes of caffeine with doxorubicin and mitoxantrone, 635
Calpain
Ritonavir inhibition of calcium-activated neutral proteases, 1481
Calphostin C
Involvement of the muscarinic acetylcholine receptor in inhibition of cell migration, 597
Effects of dexamethasone and protein kinase C inhibitors on the induction of bradykinin B_1 mRNA and the bradykinin B_1 receptor-mediated contractile response in isolated rat ileum, 2043
Calvaria
Effects of a selective cyclooxygenase-2 inhibitor, celecoxib, on bone resorption and osteoclastogenesis *in vitro*, 523
cAMP
The signalling pathway for BCG-induced interleukin-6 production in human bladder cancer cells, 273
7-Benzylamino-6-chloro-2-piperazino-4-pyrrolidino-pteridine, a potent inhibitor of cAMP-specific phosphodiesterase, enhancing nuclear protein binding to the CRE consensus sequence in human tumour cells, 659
Intracellular localization of 7-benzylamino-6-chloro-2-piperazino-4-pyrrolidino-pteridine in membrane structures impeding the inhibition of cytosolic cyclic AMP-specific phosphodiesterase, 669
A critical role for a tyrosine residue in the cannabinoid receptors for ligand recognition, 2121
cAMP responsive element
7-Benzylamino-6-chloro-2-piperazino-4-pyrrolidino-pteridine, a potent inhibitor of cAMP-specific phosphodiesterase, enhancing nuclear protein binding to the CRE consensus sequence in human tumour cells, 659
Cancer
Is inhibition of cyclooxygenase required for the anti-tumorigenic effects of nonsteroidal, anti-inflammatory drugs (NSAIDs)? *In vitro* versus *in vivo* results and the relevance for the prevention and treatment of cancer, 343
Activation of protein kinase C for protection of cells against apoptosis induced by the immunosuppressor prodigiosin, 463
Drug-resistant human lung cancer cells are more sensitive to selenium cytotoxicity. Effects on thioredoxin reductase and glutathione reductase, 1875
Candesartan
Distinct binding properties of the AT_1 receptor antagonist [^{3}H]candesartan to intact cells and membrane preparations, 1273
Cannabinoid receptor
A critical role for a tyrosine residue in the cannabinoid receptors for ligand recognition, 2121
Ca_o^{2+}-inactivated current
Hydrogen peroxide-induced current in *Xenopus* oocytes: current characteristics similar to those induced by the removal of extracellular calcium, 569
Capacitative Ca^{2+} influx
Role of mitochondria in Ca^{2+} oscillations and shape of Ca^{2+} signals in pancreatic acinar cells, 283
Carbohydrate metabolism
Carbohydrate responsive element-binding protein (ChREBP): a key regulator of glucose metabolism and fat storage, 2075

Carbonyl scavenger
Identification of α-dicarbonyl scavengers for cellular protection against carbonyl stress, 361
Carboxylesterase
Thenoyltrifluoroacetone, a potent inhibitor of carboxylesterase activity, 751
3-Carboxy-4-methyl-5-propyl-2-furanpropanoic acid
Effect of protein-bound uraemic toxins on the thermodynamic characteristics of human albumin, 1287
Cardiac function
Mitochondrial gene expression and ventricular fibrillation in ischemic/reperfused nondiabetic and diabetic myocardium, 543
Cardiovascular risk
Selective cyclooxygenase-2 (COX-2) inhibitors and potential risk of cardiovascular events, 817
Carnitine
Modulation of apoptosis and improved redox metabolism with the use of a new antioxidant formula, 1305
Carnitine palmitoyltransferase I
Effects of 5-iodotubercidin on hepatic fatty acid metabolism mediated by the inhibition of acetyl-CoA carboxylase, 1997
Carrageenan-induced pleurisy
Protective effects of Celecoxib on lung injury and red blood cells modification induced by carrageenan in the rat, 785
Caspase-3
Induction of apoptosis by diallyl disulfide through activation of caspase-3 in human leukemia HL-60 cells, 41
Wogonin and fisetin induce apoptosis in human promyeloleukemic cells, accompanied by a decrease of reactive oxygen species, and activation of caspase 3 and Ca^{2+}-dependent endonuclease, 225
In vitro induction of apoptosis vs. necrosis by widely used preservatives: 2-phenoxyethanol, a mixture of isothiazolinones, imidazolidinyl urea and 1,2-pentanediol, 437
Monoamine neurotoxins-induced apoptosis in lymphocytes by a common oxidative stress mechanism: involvement of hydrogen peroxide (H_2O_2), caspase-3, and nuclear factor kappa-B (NF-κB), p53, c-Jun transcription factors, 677
Variation in the kinetics of caspase-3 activation, Bcl-2 phosphorylation and apoptotic morphology in unselected human ovarian cancer cell lines as a response to docetaxel, 733
The alkaloid sanguinarine is effective against multidrug resistance in human cervical cells *via* bimodal cell death, 1415
Caspase
A selective plasmin inhibitor, *trans*-aminomethylcyclohexanecarbonyl-L-(*O*-picolyl)tyrosine-octylamide (YO-2), induces thymocyte apoptosis, 1315
Protection by ascorbic acid from denaturation and release of cytochrome *c*, alteration of mitochondrial membrane potential and activation of multiple caspases induced by H_2O_2, in human leukemia cells, 1325
Induction of apoptosis in HL-60 leukemia and B16 melanoma cells by the acronycine derivative S23906-1, 1443
Down-modulation of Bcl-X_L, release of cytochrome *c* and sequential activation of caspases during honokiol-induced apoptosis in human squamous lung cancer CH27 cells, 1641
Catalase
Identification of catalase in human livers as a factor that enhances phenytoin dihydroxy metabolite formation by human liver microsomes, 2081
Catalytic topoisomerase inhibitor
Inhibition of nucleotide excision repair and sensitisation of cells to DNA cross-linking anticancer drugs by F 11782, a novel fluorinated epipodophylloid, 251
Catecholamine oxidation
Cytoprotective role of taurine in a renal epithelial cell culture model, 1051
Catecholamine synthesis
Stimulation of catecholamine biosynthesis *via* the protein kinase C pathway by endothelin-1 in PC12 rat pheochromocytoma cells, 977
Catecholamines
Protective effect of boldine on dopamine-induced membrane permeability transition in brain mitochondria and viability loss in PC12 cells, 495
CCRF-CEM cells
Reduced DNA ligase activity in etoposide resistant human lymphatic leukaemia CEM cells, 259
CD95
p53-Independent induction of Fas and apoptosis in leukemic cells by an adenosine derivative, Cl-IB-MECA, 871
CD13
A doxorubicin–CNGRC-peptide conjugate with prodrug properties, 897
$CD4^+$ lymphocytes
κ-Opioid receptor agonist inhibition of HIV-1 envelope glycoprotein-mediated membrane fusion and CXCR4 expression on $CD4^+$ lymphocytes, 1037
cDNA-expression system
Substrate specificity for rat cytochrome P450 (CYP) isoforms: screening with cDNA-expressed systems of the rat, 889
Celecoxib
Effects of a selective cyclooxygenase-2 inhibitor, celecoxib, on bone resorption and osteoclastogenesis *in vitro*, 523
Protective effects of Celecoxib on lung injury and red blood cells modification induced by carrageenan in the rat, 785
Selective cyclooxygenase-2 (COX-2) inhibitors and potential risk of cardiovascular events, 817
Cell adhesion
Involvement of the muscarinic acetylcholine receptor in inhibition of cell migration, 597
Cell cycle
In vitro pharmacokinetics and pharmacodynamics of 1,3-bis(2-chloroethyl)-1-nitrosourea (BCNU), 1209
Induction of apoptosis in HL-60 leukemia and B16 melanoma cells by the acronycine derivative S23906-1, 1443
Cell death
In vitro pharmacokinetics and pharmacodynamics of 1,3-bis(2-chloroethyl)-1-nitrosourea (BCNU), 1209
Dose-dependent cysteine-mediated protection of insulin-producing cells from damage by hydrogen peroxide, 1297
Autoschizis: a novel cell death, 1773
Cell detachment
Involvement of the muscarinic acetylcholine receptor in inhibition of cell migration, 597
Cell growth
Differentiation of PC12 cells induced by N^8-acetylspermidine and by N^8-acetylspermidine deacetylase inhibition, 2011
Cell invasion
Matrix and serine protease expression during leukemic cell differentiation induced by aclacinomycin and all-*trans*-retinoic acid, 179
Cell migration
Involvement of the muscarinic acetylcholine receptor in inhibition of cell migration, 597
Cell monolayers
Influence of *t*-butylhydroquinone and β-naphthoflavone on formation and transport of 4-methylumbelliferone glucuronide in Caco-2/TC-7 cell monolayers, 123
Cell proliferation
Differential regulation of multidrug resistance-associated protein 2 (MRP2) and cytochromes P450 2B1/2 and 3A1/2 in phenobarbital-treated hepatocytes, 333
Actions of derivatives of dehydroaltenusin, a new mammalian DNA polymerase α-specific inhibitor, 421
Cellular free Ca^{2+}
Inhibition of superoxide anion generation by YC-1 in rat neutrophils through cyclic GMP-dependent and -independent mechanisms, 577
Cellular pharmacokinetics
Influence of isomerisation on the growth inhibitory effects and cellular activity of 13-*cis* and all-*trans* retinoic acid in neuroblastoma cells, 207

Cellular uptake
Intracellular localization of 7-benzylamino-6-chloro-2-piperazino-4-pyrrolidino-pteridine in membrane structures impeding the inhibition of cytosolic cyclic AMP-specific phosphodiesterase, 669
Cerebrum
Protein levels of neurofilament subunits in the hen central nervous system following prevention and potentiation of diisopropyl phosphorofluoridate (DFP)-induced delayed neurotoxicity, 11
Cervical cancer
Increase of the resistance of human cervical carcinoma cells to cisplatin by inhibition of the MEK to ERK signaling pathway partly *via* enhancement of anticancer drug-induced NFκB activation, 1423
CF3 fibroblasts
Identification of α-dicarbonyl scavengers for cellular protection against carbonyl stress, 361
cGMP
Pharmacological characterization of the ATP-dependent low K_m guanosine 3′,5′-cyclic monophosphate (cGMP) transporter in human erythrocytes, 945
C3H/10T½ cell
Thiourea toxicity in mouse C3H/10T½ cells expressing human flavin-dependent monooxygenase 3, 1941
Chelerythrine
Modulation of apoptosis by mitochondrial uncouplers: apoptosis-delaying features despite intrinsic cytotoxicity, 471
Involvement of the muscarinic acetylcholine receptor in inhibition of cell migration, 597
Chemical kinetics
Modifying rates of reductive elimination of leaving groups from indolequinone prodrugs: a key factor in controlling hypoxia-selective drug release, 1629
Chemiluminescence
Sensitization of human neutrophil defense activities through activation of platelet-activating factor receptors by ginkgolide B, a bioactive component of the *Ginkgo biloba* extract EGB 761, 1241
Chemokine receptor antagonists
Chemokines as novel therapeutic targets in inflammatory diseases, 1191
Chemokine receptors
Chemokines as novel therapeutic targets in inflammatory diseases, 1191
Chemokine/chemoattractant
Regulatory effects of deoxycholic acid, a component of the anti-inflammatory traditional Chinese medicine Niuhuang, on human leukocyte response to chemoattractants, 533
Chemokines
Chemokines as novel therapeutic targets in inflammatory diseases, 1191
Chemoprevention
Investigations on the effects of oltipraz on the nucleotide excision repair in the liver, 745
Induction of glutathione-*S*-transferase mRNA levels by chemopreventive selenocysteine *Se*-conjugates, 1843
Chemoprotection
Bleomycin genotoxicity and amifostine (WR-2721) cell protection in normal leukocytes vs. K562 tumoral cells, 967
BGP-15 — a novel poly(ADP-ribose) polymerase inhibitor — protects against nephrotoxicity of cisplatin without compromising its antitumor activity, 1099
Chemotaxis
Regulatory effects of deoxycholic acid, a component of the anti-inflammatory traditional Chinese medicine Niuhuang, on human leukocyte response to chemoattractants, 533
Chemotherapy
Activation of protein kinase C for protection of cells against apoptosis induced by the immunosuppressor prodigiosin, 463
Bleomycin genotoxicity and amifostine (WR-2721) cell protection in normal leukocytes vs. K562 tumoral cells, 967
Chickens
Protein levels of neurofilament subunits in the hen central nervous system following prevention and potentiation of diisopropyl phosphorofluoridate (DFP)-induced delayed neurotoxicity, 11
Chlorambucil
Homologous recombinational repair vis-à-vis chlorambucil resistance in chronic lymphocytic leukemia, 1585
Chloride channel
Differential regulation of Ca^{2+}-dependent Cl^- currents by FP prostanoid receptor isoforms in *Xenopus* oocytes, 1797
Chloroacetaldehyde
Stem cell toxicity of oxazaphosphorine metabolites in comparison to their antileukemic activity, 1337
Chloroquine
Differential effects of 4-aminoquinoline-containing antimalarial drugs on hemoglobin digestion in *Plasmodium falciparum*-infected erythrocytes, 393
Novel phenothiazine antimalarials: synthesis, antimalarial activity, and inhibition of the formation of β-haematin, 833
Chlorpromazine
Novel phenothiazine antimalarials: synthesis, antimalarial activity, and inhibition of the formation of β-haematin, 833
CHO cells
Distinct binding properties of the AT_1 receptor antagonist [^{3}H]candesartan to intact cells and membrane preparations, 1273
Dopamine D_2 receptor-induced COX-2-mediated production of prostaglandin E_2 in D_2-transfected Chinese hamster ovary cells without simultaneous administration of a Ca^{2+}-mobilizing agent, 2151
Cholecystokinin
Leptin, gut, and food intake, 1579
Cholestasis
Dapsone-induced cholestasis and impairment of bile salt output in the rat, 1553
Cholesterol
Characterization of selective estrogen receptor modulator (SERM) activity in two triarylethylene oxybutyric acids, 1517
Elevated uptake of low density lipoprotein by drug resistant human leukemic cell lines, 2169
Cholesteryl ester
Intracellular mechanisms mediating the inhibition of apoB-containing lipoprotein synthesis and secretion in HepG2 cells by avasimibe (CI-1011), a novel acyl-coenzyme A: cholesterol acyltransferase (ACAT) inhibitor, 349
Cholestyramine
Effects of streptozotocin-induced diabetes on acetoacetyl-CoA synthetase activity in rats, 1851
Chromatin condensation
A selective plasmin inhibitor, *trans*-aminomethylcyclohexanecarbonyl-L-(*O*-picolyl)tyrosine-octylamide (YO-2), induces thymocyte apoptosis, 1315
Chronic lymphocytic leukemia
Homologous recombinational repair vis-à-vis chlorambucil resistance in chronic lymphocytic leukemia, 1585
CHS 828
Modulation of pyridyl cyanoguanidine (CHS 828) induced cytotoxicity by 3-aminobenzamide in U-937 GTB cells, 1491
Circular muscle
Structure-activity relationship of neurokinin A(4–10) at the human tachykinin NK_2 receptor: the effect of amino acid substitutions on receptor affinity and function, 2181
Cisplatin
Investigations on the effects of oltipraz on the nucleotide excision repair in the liver, 745
BGP-15 — a novel poly(ADP-ribose) polymerase inhibitor — protects against nephrotoxicity of cisplatin without compromising its antitumor activity, 1099
JM216-, JM118-, and cisplatin-induced cytotoxicity in relation to platinum-DNA adduct formation, glutathione levels and p53 status

in human tumour cell lines with different sensitivities to cisplatin, 1989
13-*Cis*-retinoic acid
Human cytochrome P450s involved in the metabolism of 9-*cis*- and 13-*cis*-retinoic acids, 933
9-*Cis*-retinoic acid
Human cytochrome P450s involved in the metabolism of 9-*cis*- and 13-*cis*-retinoic acids, 933
c-Jun
Reversal of cisplatin resistance in human ovarian cancer cell lines by a c-*jun* antisense oligodeoxynucleotide (ISIS 10582): evidence for the role of transcription factor overexpression in determining resistant phenotype, 1699
Cl^- channel blocker
Hydrogen peroxide-induced current in *Xenopus* oocytes: current characteristics similar to those induced by the removal of extracellular calcium, 569
Cleavable complex
Formation and longevity of idarubicin-induced DNA topoisomerase II cleavable complexes in K562 human leukaemia cells, 1807
Clofibric acid
Clofibric acid down-regulation of metallothionein IIA in HepG2 human hepatoma cells, 237
c-*myc*
Differentiation-dependent repression of c-*myc*, *B22*, *COX II* and *COX IV* genes in murine erythroleukemia (MEL) cells, 1009
c-myc
Induction of G_2/M arrest and inhibition of *c-myc* and *p53* transcription by WP631 in Jurkat T lymphocytes, 1251
Cocaine
DNA sequence of butyrylcholinesterase from the rat: expression of the protein and characterization of the properties of rat butyrylcholinesterase, 2101
Coenzyme Q_{10}
Modulation of apoptosis and improved redox metabolism with the use of a new antioxidant formula, 1305
Coimmunoprecipitation
Bcl-2 family-mediated apoptotic effects of 3,3′-diindolylmethane (DIM) in human breast cancer cells, 1085
Collagen
Inhibition of hepatic stellate cell collagen synthesis by *N*-(methylamino)isobutyric acid, 697
Comet assay
Bleomycin genotoxicity and amifostine (WR-2721) cell protection in normal leukocytes vs. K562 tumoral cells, 967
Competitive inhibition
Inhibition of cyclooxygenase and prostaglandin E_2 synthesis by γ-mangostin, a xanthone derivative in mangosteen, in C6 rat glioma cells, 73
Complement
Effects of 5-aminoisoquinolinone, a water-soluble, potent inhibitor of the activity of poly (ADP-ribose) polymerase, in a rodent model of lung injury, 293
Complex I
Differentiation-dependent repression of c-*myc*, *B22*, *COX II* and *COX IV* genes in murine erythroleukemia (MEL) cells, 1009
Obligatory role of membrane events in the regulatory effect of metformin on the respiratory chain function, 1259
Complex IV
Differentiation-dependent repression of c-*myc*, *B22*, *COX II* and *COX IV* genes in murine erythroleukemia (MEL) cells, 1009
Obligatory role of membrane events in the regulatory effect of metformin on the respiratory chain function, 1259
Confocal microscopy
Intracellular localization of 7-benzylamino-6-chloro-2-piperazino-4-pyrrolidino-pteridine in membrane structures impeding the inhibition of cytosolic cyclic AMP-specific phosphodiesterase, 669
Congenital jaundice
Bilirubin and uroporphyrinogen oxidation by induced cytochrome P4501A and cytochrome P4502B. Role of polyhalogenated biphenyls of different configuration, 615
Connexin43
(−)-Epicatechin effects in rat liver epithelial cells: stimulation of gap junctional communication and counteraction of its loss due to the tumor promoter 12-*O*-tetradecanoylphorbol-13-acetate, 2145
Copper complexes
Metal-organic compounds: a new approach for drug discovery. *N*1-(4-methyl-2-pyridyl)-2,3,6-trimethoxybenzamide copper(II) complex as an inhibitor of human immunodeficiency virus 1 protease, 1863
Coumarin
Lack of association between CYP2A5 induction and apoptosis in mouse primary hepatocytes, 429
COX-1
Is inhibition of cyclooxygenase required for the anti-tumorigenic effects of nonsteroidal, anti-inflammatory drugs (NSAIDs)? *In vitro* versus *in vivo* results and the relevance for the prevention and treatment of cancer, 343
COX-2
Is inhibition of cyclooxygenase required for the anti-tumorigenic effects of nonsteroidal, anti-inflammatory drugs (NSAIDs)? *In vitro* versus *in vivo* results and the relevance for the prevention and treatment of cancer, 343
COX
Dopamine D_2 receptor-induced COX-2-mediated production of prostaglandin E_2 in D_2-transfected Chinese hamster ovary cells without simultaneous administration of a Ca^{2+}-mobilizing agent, 2151
COX II
Differentiation-dependent repression of c-*myc*, *B22*, *COX II* and *COX IV* genes in murine erythroleukemia (MEL) cells, 1009
COX-2 inhibitors
Selective cyclooxygenase-2 (COX-2) inhibitors and potential risk of cardiovascular events, 817
COX IV
Differentiation-dependent repression of c-*myc*, *B22*, *COX II* and *COX IV* genes in murine erythroleukemia (MEL) cells, 1009
CRABP II
Influence of isomerisation on the growth inhibitory effects and cellular activity of 13-*cis* and all-*trans* retinoic acid in neuroblastoma cells, 207
Crotoxin
Inhibition of crotoxin phospholipase A_2 activity by manoalide associated with inactivation of crotoxin toxicity and dissociation of the heterodimeric neurotoxic complex, 755
Crystal structure
Intercalation of imidazoacridinones to DNA and its relevance to cytotoxic and antitumor activity, 1653
C-terminus
Role of the C-terminus and the long cytoplasmic loop in reduced folate carrier expression and function, 1717
Curcumin
Basal levels and patterns of anticancer drug-induced activation of nuclear factor-κB (NF-κB), and its attenuation by tamoxifen, dexamethasone, and curcumin in carcinoma cells, 1709
CXCR4
κ-Opioid receptor agonist inhibition of HIV-1 envelope glycoprotein-mediated membrane fusion and CXCR4 expression on $CD4^+$ lymphocytes, 1037
Cyclic AMP
Inhibitory effect of adrenomedullin on basal and tumour necrosis factor alpha-stimulated endothelin-1 synthesis in bovine aortic endothelial cells is independent of cyclic AMP, 149
Dual coupling of MT_1 and MT_2 melatonin receptors to cyclic AMP and phosphoinositide signal transduction cascades and their regulation following melatonin exposure, 587
Cyclic AMP metabolism
Regulation of cyclic AMP in rat pulmonary microvascular endothelial cells by rolipram-sensitive cyclic AMP phosphodiesterase (PDE4), 797

Cyclic GMP
Inhibition of superoxide anion generation by YC-1 in rat neutrophils through cyclic GMP-dependent and -independent mechanisms, 577
Cyclic nucleotide
Characterisation of cyclic nucleotide phosphodiesterase isoforms in the media layer of the main pulmonary artery, 1763
Cyclic nucleotide phosphodiesterase
Regulation of cyclic AMP in rat pulmonary microvascular endothelial cells by rolipram-sensitive cyclic AMP phosphodiesterase (PDE4), 797
Cyclooxygenase
Inhibition of cyclooxygenase and prostaglandin E_2 synthesis by γ-mangostin, a xanthone derivative in mangosteen, in C6 rat glioma cells, 73
Is inhibition of cyclooxygenase required for the anti-tumorigenic effects of nonsteroidal, anti-inflammatory drugs (NSAIDs)? *In vitro* versus *in vivo* results and the relevance for the prevention and treatment of cancer, 343
Cyclooxygenase-2 inhibitor
Effects of a selective cyclooxygenase-2 inhibitor, celecoxib, on bone resorption and osteoclastogenesis *in vitro*, 523
8-Cyclopentyl-1,3-dipropylxanthine
3-Isobutyl-1-methylxanthine (IBMX) sensitizes cardiac myocytes to anoxia, 2055
Cyclosporin A
Modulation of *mdr1a* and *CYP3A* gene expression in the intestine and liver as possible cause of changes in the cyclosporin. A disposition kinetics by dexamethasone, 777
CYP
Lack of association between CYP2A5 induction and apoptosis in mouse primary hepatocytes, 429
Substrate specificity for rat cytochrome P450 (CYP) isoforms: screening with cDNA-expressed systems of the rat, 889
Human cytochrome P450s involved in the metabolism of 9-*cis*- and 13-*cis*-retinoic acids, 933
CYP1A1
Bilirubin and uroporphyrinogen oxidation by induced cytochrome P4501A and cytochrome P4502B. Role of polyhalogenated biphenyls of different configuration, 615
CYP3A2
Modulation of *mdr1a* and *CYP3A* gene expression in the intestine and liver as possible cause of changes in the cyclosporin. A disposition kinetics by dexamethasone, 777
CYP3A4
Human cytochrome P450s involved in the metabolism of 9-*cis*- and 13-*cis*-retinoic acids, 933
CYP3A7
Human cytochrome P450s involved in the metabolism of 9-*cis*- and 13-*cis*-retinoic acids, 933
CYP1A2
Differences in caffeine and paraxanthine metabolism between human and murine CYP1A2, 2159
CYP2B1
Bilirubin and uroporphyrinogen oxidation by induced cytochrome P4501A and cytochrome P4502B. Role of polyhalogenated biphenyls of different configuration, 615
CYP2B
Sexual dimorphic expression of mouse hepatic CYP2B: alterations during development or after hypophysectomy, 2037
CYP2C8
Human cytochrome P450s involved in the metabolism of 9-*cis*- and 13-*cis*-retinoic acids, 933
CYP2C9
Human cytochrome P450s involved in the metabolism of 9-*cis*- and 13-*cis*-retinoic acids, 933
Cysteine
Methionine synthase activity and sulphur amino acid levels in the rat liver tumour cells HTC and Phi-1, 381
Dose-dependent cysteine-mediated protection of insulin-producing cells from damage by hydrogen peroxide, 1297
Cysteinyl-leukotriene
Pharmacological differences among $CysLT_1$ receptor antagonists with respect to LTC_4 and LTD_4 in human lung parenchyma, 1537
Cytochrome *c*
Protection by ascorbic acid from denaturation and release of cytochrome *c*, alteration of mitochondrial membrane potential and activation of multiple caspases induced by H_2O_2, in human leukemia cells, 1325
Down-modulation of Bcl-X_L, release of cytochrome *c* and sequential activation of caspases during honokiol-induced apoptosis in human squamous lung cancer CH27 cells, 1641
Involvement of microtubules and mitochondria in the antagonism of arsenic trioxide on paclitaxel-induced apoptosis, 1831
Cytochrome *c* oxidase
Alterations in the expression of cytochrome *c* oxidase subunits in doxorubicin-resistant leukemia K562 cells, 823
Differentiation-dependent repression of c-*myc*, *B22*, *COX II* and *COX IV* genes in murine erythroleukemia (MEL) cells, 1009
Cytochrome P450
Differential regulation of multidrug resistance-associated protein 2 (MRP2) and cytochromes P450 2B1/2 and 3A1/2 in phenobarbital-treated hepatocytes, 333
Lack of association between CYP2A5 induction and apoptosis in mouse primary hepatocytes, 429
Associations between human liver and kidney cadmium content and immunochemically detected CYP4A11 apoprotein, 693
Identification of catalase in human livers as a factor that enhances phenytoin dihydroxy metabolite formation by human liver microsomes, 2081
Cytochrome P450 2D6
Reduced (±)-3,4-methylenedioxymethamphetamine ("Ecstasy") metabolism with cytochrome P450 2D6 inhibitors and pharmacogenetic variants *in vitro*, 2111
Cytochrome P4501A
Serum withdrawal leads to reduced aryl hydrocarbon receptor expression and loss of cytochrome P4501A inducibility in PLHC-1 cells, 1405
Cytochrome P450s
Human cytochrome P450s involved in the metabolism of 9-*cis*- and 13-*cis*-retinoic acids, 933
Cytofluorimetric analysis
In vitro induction of apoptosis vs. necrosis by widely used preservatives: 2-phenoxyethanol, a mixture of isothiazolinones, imidazolidinyl urea and 1,2-pentanediol, 437
Cytokines
The involvement of L-γ-glutamyl-L-cysteinyl-glycine (glutathione/GSH) in the mechanism of redox signaling mediating $MAPK^{p38}$-dependent regulation of pro-inflammatory cytokine production, 305
Cytoplasmic loop
Role of the C-terminus and the long cytoplasmic loop in reduced folate carrier expression and function, 1717
Cytoprotection
Cytoprotective role of taurine in a renal epithelial cell culture model, 1051
Cytoskeletal poison
Inhibition of tubulin polymerization by vitilevuamide, a bicyclic marine peptide, at a site distinct from colchicine, the vinca alkaloids, and dolastatin 10, 707
Cytosol
Identification of catalase in human livers as a factor that enhances phenytoin dihydroxy metabolite formation by human liver microsomes, 2081
Cytosolic calcium concentration
Desensitization of insulin secretion, 1921
Cytotoxic drugs
Pharmacological characterization of the ATP-dependent low K_m guanosine 3′,5′-cyclic monophosphate (cGMP) transporter in human erythrocytes, 945

Cytotoxicity
Sensitivity of HaCat keratinocytes to diabetogenic toxins, 171
Influence of isomerisation on the growth inhibitory effects and cellular activity of 13-*cis* and all-*trans* retinoic acid in neuroblastoma cells, 207
Selective inhibition of the activities of both eukaryotic DNA polymerases and DNA topoisomerases by elenic acid, 399
Actions of derivatives of dehydroaltenusin, a new mammalian DNA polymerase α-specific inhibitor, 421
Cytoprotective role of taurine in a renal epithelial cell culture model, 1051
Thiourea toxicity in mouse C3H/10T½ cells expressing human flavin-dependent monooxygenase 3, 1941
Characterization of F-actin depolymerization as a major toxic event induced by pectenotoxin-6 in neuroblastoma cells, 1979

Dapsone
Dapsone-induced cholestasis and impairment of bile salt output in the rat, 1553
Daunorubicin
Preferential efflux by P-glycoprotein, but not MRP1, of compounds containing a free electron donor amine, 1471
DC-TA-46
7-Benzylamino-6-chloro-2-piperazino-4-pyrrolidino-pteridine, a potent inhibitor of cAMP-specific phosphodiesterase, enhancing nuclear protein binding to the CRE consensus sequence in human tumour cells, 659
Intracellular localization of 7-benzylamino-6-chloro-2-piperazino-4-pyrrolidino-pteridine in membrane structures impeding the inhibition of cytosolic cyclic AMP-specific phosphodiesterase, 669
α-D-Deoxyribose
Pathways for α-D-ribose utilization for nucleobase salvage and 5-fluorouracil activation in rat brain, 117
p,p′-DDT
Effects of 1,1,1-trichloro-2,2-bis(*p*-chlorophenyl)-ethane (*p,p′*-DDT) on 3T3-L1 and 3T3-F442A adipocyte differentiation, 997
De novo synthesis
Enhancement of phosphatidylcholine biosynthesis by angiotensin-(1–7) in the rat renal cortex, 507
DEA/NO
Regulation of microsomal and cytosolic glutathione *S*-transferase activities by *S*-nitrosylation, 1397
Deesterification of steroid fatty acid esters
Effect of clofibrate administration on the esterification and deesterification of steroid hormones by liver and extrahepatic tissues in rats, 985
Degradation
Intracellular mechanisms mediating the inhibition of apoB-containing lipoprotein synthesis and secretion in HepG2 cells by avasimibe (CI-1011), a novel acyl-coenzyme A: cholesterol acyltransferase (ACAT) inhibitor, 349
Dehydroaltenusin
Actions of derivatives of dehydroaltenusin, a new mammalian DNA polymerase α-specific inhibitor, 421
Deletion
Role of the C-terminus and the long cytoplasmic loop in reduced folate carrier expression and function, 1717
Dendrimers
Pharmacological approaches to prion research, 1383
Dendrites
Modulation of dendritic release of dopamine by metabotropic glutamate receptors in rat substantia nigra, 1343
Denitrosation
The polymorphic human glutathione transferase T1-1, the most efficient glutathione transferase in the denitrosation and inactivation of the anticancer drug 1,3-bis(2-chloroethyl)-1-nitrosourea, 191
Deoxycholic acid (DCA)
Regulatory effects of deoxycholic acid, a component of the anti-inflammatory traditional Chinese medicine Niuhuang, on human leukocyte response to chemoattractants, 533
Deoxycytidine deaminase
Modifications of deoxycytidine kinase and deaminase activities by docosahexaenoic acid in normal and transformed rat fibroblasts, 717
Deoxycytidine kinase
Modifications of deoxycytidine kinase and deaminase activities by docosahexaenoic acid in normal and transformed rat fibroblasts, 717
15-Deoxy-prostaglandin J_2
Inhibition of inducible prostaglandin E_2 synthase by 15-deoxy-$\Delta^{12,14}$-prostaglandin J_2 and polyunsaturated fatty acids, 1183
Dermatophytes
Antimicrobial effect of resveratrol on dermatophytes and bacterial pathogens of the skin, 99
des-Arg^9-Bradykinin
Effects of dexamethasone and protein kinase C inhibitors on the induction of bradykinin B_1 mRNA and the bradykinin B_1 receptor-mediated contractile response in isolated rat ileum, 2043
Desensitization
Desensitization of insulin secretion, 1921
Development
Physiological factors affecting the expression of FMO1 and FMO3 in the rat liver and kidney, 1453
Sexual dimorphic expression of mouse hepatic CYP2B: alterations during development or after hypophysectomy, 2037
Developmental regulation
Developmental regulation of flavin-containing monooxygenase form 1 in the liver and kidney of fetal and neonatal rabbits, 1353
Developmental toxicity
Relative importance of maternal and embryonic microsomal epoxide hydrolase in 7,12-dimethylbenz[*a*]anthracene-induced developmental toxicity, 1077
Dexamethasone
Modulation of *mdr1a* and *CYP3A* gene expression in the intestine and liver as possible cause of changes in the cyclosporin. A disposition kinetics by dexamethasone, 777
A GAL4-based yeast three-hybrid system for the identification of small molecule–target protein interactions, 1619
Effects of dexamethasone and protein kinase C inhibitors on the induction of bradykinin B_1 mRNA and the bradykinin B_1 receptor-mediated contractile response in isolated rat ileum, 2043
Coordinate regulation of UDP-glucuronosyltransferase UGT1A6 induction by 3-methylcholanthrene and multidrug resistance protein MRP2 expression by dexamethasone in primary rat hepatocytes, 2137
DFP
Protein levels of neurofilament subunits in the hen central nervous system following prevention and potentiation of diisopropyl phosphorofluoridate (DFP)-induced delayed neurotoxicity, 11
DHA
Modifications of deoxycytidine kinase and deaminase activities by docosahexaenoic acid in normal and transformed rat fibroblasts, 717
Diabetes
Troglitazone does not protect rat pancreatic β cells against free fatty acid-induced cytotoxicity, 1281
Inhibition of gluconeogenesis by vanadium and metformin in kidney-cortex tubules isolated from control and diabetic rabbits, 1371
Effects of streptozotocin-induced diabetes on acetoacetyl-CoA synthetase activity in rats, 1851
Diabetes mellitus
Vanadyl as a catalyst of human lipoprotein oxidation, 375
GTP-binding proteins in cell survival and demise: the emerging picture in the pancreatic β-cell, 1027
Diallyl disulfide
Induction of apoptosis by diallyl disulfide through activation of caspase-3 in human leukemia HL-60 cells, 41
α-Dicarbonyl compounds
Identification of α-dicarbonyl scavengers for cellular protection against carbonyl stress, 361

Dietary indole
Bcl-2 family-mediated apoptotic effects of 3,3′-diindolylmethane (DIM) in human breast cancer cells, 1085
Differentiation
Differentiation-dependent repression of c-*myc*, *B22*, *COX II* and *COX IV* genes in murine erythroleukemia (MEL) cells, 1009
Regulation of phospholipase C activation by the number of H_2 receptors during Ca^{2+}-induced differentiation of mouse keratinocytes, 1785
Differentiation of PC12 cells induced by N^8-acetylspermidine and by N^8-acetylspermidine deacetylase inhibition, 2011
Dihydrotestosterone
The effects of natural ligands of hormone receptors and their antagonists on telomerase activity in the androgen sensitive prostatic cancer cell line LNCaP, 1177
5,6-Dihydroxytryptamine
Monoamine neurotoxins-induced apoptosis in lymphocytes by a common oxidative stress mechanism: involvement of hydrogen peroxide (H_2O_2), caspase-3, and nuclear factor kappa-B (NF-κB), p53, c-Jun transcription factors, 677
5,7-Dihydroxytryptamine
Monoamine neurotoxins-induced apoptosis in lymphocytes by a common oxidative stress mechanism: involvement of hydrogen peroxide (H_2O_2), caspase-3, and nuclear factor kappa-B (NF-κB), p53, c-Jun transcription factors, 677
Dimerumic acid
Dimerumic acid as an antioxidant from the mold, *Monascus anka*: the inhibition mechanisms against lipid peroxidation and hemeprotein-mediated oxidation, 1019
7,12-Dimethylbenz[*a*]anthracene
Relative importance of maternal and embryonic microsomal epoxide hydrolase in 7,12-dimethylbenz[*a*]anthracene-induced developmental toxicity, 1077
2,4-Dinitrophenol
Effect of the new matrix metalloproteinase inhibitor RO-28-2653 on mitochondrial function, 725
Dinitrosyl dithiolato iron complex
In vivo nitric oxide transfer of a physiological NO carrier, dinitrosyl dithiolato iron complex, to target complex, 485
Dissociation
Distinct binding properties of the AT_1 receptor antagonist [^{3}H]candesartan to intact cells and membrane preparations, 1273
Distribution
The distribution of copper, zinc- and manganese-superoxide dismutase, and glutathione peroxidase messenger ribonucleic acid in rat basal ganglia, 1159
DNA binding
Induction of G_2/M arrest and inhibition of *c-myc* and *p53* transcription by WP631 in Jurkat T lymphocytes, 1251
DNA cross-linking agent
Inhibition of nucleotide excision repair and sensitisation of cells to DNA cross-linking anticancer drugs by F 11782, a novel fluorinated epipodophylloid, 251
DNA damage
Reduction of acute photodamage in skin by topical application of a novel PARP inhibitor, 921
Bleomycin genotoxicity and amifostine (WR-2721) cell protection in normal leukocytes vs. K562 tumoral cells, 967
DNA damaging agents
Fas/CD95-mediated apoptosis in human glioblastoma cells: a target for sensitisation to topoisomerase I inhibitors, 881
DNA fragmentation
A selective plasmin inhibitor, *trans*-aminomethylcyclohexanecarbonyl-L-(*O*-picolyl)tyrosine-octylamide (YO-2), induces thymocyte apoptosis, 1315
DNA intercalation
Intercalation of imidazoacridinones to DNA and its relevance to cytotoxic and antitumor activity, 1653
DNA interstrand cross-links
In vitro pharmacokinetics and pharmacodynamics of 1,3-bis(2-chloroethyl)-1-nitrosourea (BCNU), 1209
DNA ligase (EC 6.5.1.1)
Reduced DNA ligase activity in etoposide resistant human lymphatic leukaemia CEM cells, 259
DNA polymerase
Selective inhibition of the activities of both eukaryotic DNA polymerases and DNA topoisomerases by elenic acid, 399
DNA polymerase α
Actions of derivatives of dehydroaltenusin, a new mammalian DNA polymerase α-specific inhibitor, 421
DNA repair
Interaction of mammalian O^6-alkylguanine-DNA alkyltransferases with O^6-benzylguanine, 1431
Homologous recombinational repair vis-à-vis chlorambucil resistance in chronic lymphocytic leukemia, 1585
DNA replication
Actions of derivatives of dehydroaltenusin, a new mammalian DNA polymerase α-specific inhibitor, 421
DNA topoisomerase
Selective inhibition of the activities of both eukaryotic DNA polymerases and DNA topoisomerases by elenic acid, 399
DNA topoisomerase II
Formation and longevity of idarubicin-induced DNA topoisomerase II cleavable complexes in K562 human leukaemia cells, 1807
DNIC
In vivo nitric oxide transfer of a physiological NO carrier, dinitrosyl dithiolato iron complex, to target complex, 485
Docetaxel
Variation in the kinetics of caspase-3 activation, Bcl-2 phosphorylation and apoptotic morphology in unselected human ovarian cancer cell lines as a response to docetaxel, 733
Dog UGT1A6
Tissue-specific regulation of canine intestinal and hepatic phenol and morphine UDP-glucuronosyltransferases by β-naphthoflavone in comparison with humans, 1683
Dopamine
Association of dopamine D_3 receptors with actin-binding protein 280 (ABP-280), 859
Differentiation of PC12 cells induced by N^8-acetylspermidine and by N^8-acetylspermidine deacetylase inhibition, 2011
Dopamine D_2 receptor-induced COX-2-mediated production of prostaglandin E_2 in D_2-transfected Chinese hamster ovary cells without simultaneous administration of a Ca^{2+}-mobilizing agent, 2151
Dopamine D_2 receptors
Dopamine D_2 receptor-induced COX-2-mediated production of prostaglandin E_2 in D_2-transfected Chinese hamster ovary cells without simultaneous administration of a Ca^{2+}-mobilizing agent, 2151
Dopamine release
Modulation of dendritic release of dopamine by metabotropic glutamate receptors in rat substantia nigra, 1343
Dopamine transporter
A novel mechanism of action and potential use for lobeline as a treatment for psychostimulant abuse, 89
Selective dopaminergic neurotoxicity of isoquinoline derivatives related to Parkinson's disease: studies using heterologous expression systems of the dopamine transporter, 909
Mitochondrial toxin inhibition of [^{3}H]dopamine uptake into rat striatal synaptosomes, 1499
Doxorubicin
A doxorubicin–CNGRC-peptide conjugate with prodrug properties, 897
Drug-resistant human lung cancer cells are more sensitive to selenium cytotoxicity. Effects on thioredoxin reductase and glutathione reductase, 1875
Doxorubicin (adriamycin)
Alterations in the expression of cytochrome *c* oxidase subunits in doxorubicin-resistant leukemia K562 cells, 823

Doxorubicin–peptide conjugate
A doxorubicin–CNGRC-peptide conjugate with prodrug properties, 897
D-Penicillamine
Identification of α-dicarbonyl scavengers for cellular protection against carbonyl stress, 361
α-D-Ribose
Pathways for α-D-ribose utilization for nucleobase salvage and 5-fluorouracil activation in rat brain, 117
Drug clearance
Enhanced clearance of topoisomerase I inhibitors from human colon cancer cells by glucuronidation, 607
Drug combination
Inhibition of nucleotide excision repair and sensitisation of cells to DNA cross-linking anticancer drugs by F 11782, a novel fluorinated epipodophylloid, 251
Involvement of microtubules and mitochondria in the antagonism of arsenic trioxide on paclitaxel-induced apoptosis, 1831
Drug interactions
Reduced (±)-3,4-methylenedioxymethamphetamine ("Ecstasy") metabolism with cytochrome P450 2D6 inhibitors and pharmacogenetic variants *in vitro*, 2111
Drug metabolism
Substrate specificity for rat cytochrome P450 (CYP) isoforms: screening with cDNA-expressed systems of the rat, 889
Reduced (±)-3,4-methylenedioxymethamphetamine ("Ecstasy") metabolism with cytochrome P450 2D6 inhibitors and pharmacogenetic variants *in vitro*, 2111
Drug resistance
The polymorphic human glutathione transferase T1-1, the most efficient glutathione transferase in the denitrosation and inactivation of the anticancer drug 1,3-bis(2-chloroethyl)-1-nitrosourea, 191
Reduced DNA ligase activity in etoposide resistant human lymphatic leukaemia CEM cells, 259
Novel phenothiazine antimalarials: synthesis, antimalarial activity, and inhibition of the formation of β-haematin, 833
Increased rate of glutathione synthesis from cystine in drug-resistant MCF-7 cells, 843
Increase of the resistance of human cervical carcinoma cells to cisplatin by inhibition of the MEK to ERK signaling pathway partly *via* enhancement of anticancer drug-induced NFκB activation, 1423
Interaction of mammalian O^6-alkylguanine-DNA alkyltransferases with O^6-benzylguanine, 1431
Homologous recombinational repair vis-à-vis chlorambucil resistance in chronic lymphocytic leukemia, 1585
Reversal of cisplatin resistance in human ovarian cancer cell lines by a c-*jun* antisense oligodeoxynucleotide (ISIS 10582): evidence for the role of transcription factor overexpression in determining resistant phenotype, 1699
Basal levels and patterns of anticancer drug-induced activation of nuclear factor-κB (NF-κB), and its attenuation by tamoxifen, dexamethasone, and curcumin in carcinoma cells, 1709
Drug-resistant human lung cancer cells are more sensitive to selenium cytotoxicity. Effects on thioredoxin reductase and glutathione reductase, 1875
Drug transport
Differential regulation of multidrug resistance-associated protein 2 (MRP2) and cytochromes P450 2B1/2 and 3A1/2 in phenobarbital-treated hepatocytes, 333
Drug uptake
Enhanced clearance of topoisomerase I inhibitors from human colon cancer cells by glucuronidation, 607
Drug-metabolizing enzymes
Developmental regulation of flavin-containing monooxygenase form 1 in the liver and kidney of fetal and neonatal rabbits, 1353

Ecto-nucleotidases
Apoptosis induced by extracellular ATP in the mouse neuroblastoma cell line N1E-115: studies on involvement of P2 receptors and adenosine, 1119
Edema
Purification and characterization of a phospholipase A_2 isoenzyme isolated from *Lachesis muta* snake venom, 1589
Egr-1
Neuronal cell death induced by antidepressants: lack of correlation with Egr-1, NF-κB and extracellular signal-regulated protein kinase activation, 1507
Electron spin resonance (ESR)
Dimerumic acid as an antioxidant from the mold, *Monascus anka*: the inhibition mechanisms against lipid peroxidation and hemeprotein-mediated oxidation, 1019
Antioxidant properties of Thonningianin A, isolated from the African medicinal herb, *Thonningia sanguinea*, 1725
Electrophile response element
Glutamate–cysteine ligase modifier subunit: mouse *Gclm* gene structure and regulation by agents that cause oxidative stress, 1739
Electrospray ionization-mass spectrometry/mass spectrometry
Biochemical and pharmacological characterization of the venom of the black scorpion *Heterometrus spinifer*, 49
Elenic acid
Selective inhibition of the activities of both eukaryotic DNA polymerases and DNA topoisomerases by elenic acid, 399
Embryo
Relative importance of maternal and embryonic microsomal epoxide hydrolase in 7,12-dimethylbenz[*a*]anthracene-induced developmental toxicity, 1077
Embryo fibroblast
Relative importance of maternal and embryonic microsomal epoxide hydrolase in 7,12-dimethylbenz[*a*]anthracene-induced developmental toxicity, 1077
Endonuclease
Wogonin and fisetin induce apoptosis in human promyeloleukemic cells, accompanied by a decrease of reactive oxygen species, and activation of caspase 3 and Ca^{2+}-dependent endonuclease, 225
Endoplasmatic reticulum
Intracellular localization of 7-benzylamino-6-chloro-2-piperazino-4-pyrrolidino-pteridine in membrane structures impeding the inhibition of cytosolic cyclic AMP-specific phosphodiesterase, 669
Endothelial cell permeability
Regulation of cyclic AMP in rat pulmonary microvascular endothelial cells by rolipram-sensitive cyclic AMP phosphodiesterase (PDE4), 797
Endothelial cells
Identification of the phospholipase A_2 isoforms that contribute to arachidonic acid release in hypoxic endothelial cells: limits of phospholipase A_2 inhibitors, 321
Lack of involvement of extracellular signal-regulated kinase (ERK) in the agonist-induced endothelial nitric oxide synthesis, 1137
Endothelial nitric oxide synthase
Lack of involvement of extracellular signal-regulated kinase (ERK) in the agonist-induced endothelial nitric oxide synthesis, 1137
Endothelin-1
Inhibitory effect of adrenomedullin on basal and tumour necrosis factor alpha-stimulated endothelin-1 synthesis in bovine aortic endothelial cells is independent of cyclic AMP, 149
Modulation of the β-adrenergic receptor system of vascular smooth muscle cells *in vitro* and *in vivo* by chronically elevated endothelin-1 levels, 1361
Endothelins (ETs)
Stimulation of catecholamine biosynthesis *via* the protein kinase C pathway by endothelin-1 in PC12 rat pheochromocytoma cells, 977
Energy charge
Tissue levels of *S*-adenosylhomocysteine in the rat kidney: effects of ischemia and homocysteine, 809
Enhancement
Identification of catalase in human livers as a factor that enhances phenytoin dihydroxy metabolite formation by human liver microsomes, 2081

Enkephalins
Tetrahydroisoquinoline derivatives of enkephalins: synthesis and properties, 1893
Enthalpy–entropy compensation
Binding thermodynamics at the human A_3 adenosine receptor, 157
Entry inhibitor
The influence of charge clustering on the anti-HIV-1 activity and *in vivo* distribution of negatively charged albumins, 1663
Enzyme inhibitor
Selective inhibition of the activities of both eukaryotic DNA polymerases and DNA topoisomerases by elenic acid, 399
Actions of derivatives of dehydroaltenusin, a new mammalian DNA polymerase α-specific inhibitor, 421
Enzyme inhibitors
Ritonavir inhibition of calcium-activated neutral proteases, 1481
(−)-Epicatechin
(−)-Epicatechin effects in rat liver epithelial cells: stimulation of gap junctional communication and counteraction of its loss due to the tumor promoter 12-*O*-tetradecanoylphorbol-13-acetate, 2145
Epigallocatechin gallate
Structure–activity relationships for inhibition of human 5α-reductases by polyphenols, 1165
Epoxide hydrolase
Structural refinement of inhibitors of urea-based soluble epoxide hydrolases, 1599
EPR spectroscopy
In vivo nitric oxide transfer of a physiological NO carrier, dinitrosyl dithiolato iron complex, to target complex, 485
ERK
Increase of the resistance of human cervical carcinoma cells to cisplatin by inhibition of the MEK to ERK signaling pathway partly *via* enhancement of anticancer drug-induced NFκB activation, 1423
ESR
ESR analysis of spin adducts of alkoxyl and lipid-derived radicals with the spin trap Trazon, 1465
17β-Estradiol
The effects of natural ligands of hormone receptors and their antagonists on telomerase activity in the androgen sensitive prostatic cancer cell line LNCaP, 1177
Estrogen receptor
Characterization of selective estrogen receptor modulator (SERM) activity in two triarylethylene oxybutyric acids, 1517
Ethanol
Resistance of HepG2 cells against the adverse effects of ethanol related to neutral lipid and phospholipid metabolism, 1485
Etoposide
Reduced DNA ligase activity in etoposide resistant human lymphatic leukaemia CEM cells, 259
Evolution
Analysis of C-terminally substituted tachykinin-like peptide agonists by means of aequorin-based luminescent assays for human and insect neurokinin receptors, 1675
Exendin-4
Exendin-4 increases insulin sensitivity via a PI-3-kinase-dependent mechanism: contrasting effects of GLP-1, 993
Expression
Induction of UDP-glucuronosyltransferase 1A8 mRNA by 3-methylcholanthene in rat hepatoma cells, 767
Modulation of *mdr1a* and *CYP3A* gene expression in the intestine and liver as possible cause of changes in the cyclosporin A disposition kinetics by dexamethasone, 777
Physiological factors affecting the expression of FMO1 and FMO3 in the rat liver and kidney, 1453
Sexual dimorphic expression of mouse hepatic CYP2B: alterations during development or after hypophysectomy, 2037
Extracellular signal-regulated kinase
Lack of involvement of extracellular signal-regulated kinase (ERK) in the agonist-induced endothelial nitric oxide synthesis, 1137
Neuronal cell death induced by antidepressants: lack of correlation with Egr-1, NF-κB and extracellular signal-regulated protein kinase activation, 1507

F 11782
Inhibition of nucleotide excision repair and sensitisation of cells to DNA cross-linking anticancer drugs by F 11782, a novel fluorinated epipodophylloid, 251
Facilitative transporter
Role of the C-terminus and the long cytoplasmic loop in reduced folate carrier expression and function, 1717
F-actin
Characterization of F-actin depolymerization as a major toxic event induced by pectenotoxin-6 in neuroblastoma cells, 1979
Fas/CD95
Fas/CD95-mediated apoptosis in human glioblastoma cells: a target for sensitisation to topoisomerase I inhibitors, 881
Fatty acid
Associations between human liver and kidney cadmium content and immunochemically detected CYP4A11 apoprotein, 693
Inhibition of rat lipoprotein oxidation after tetradecylthioacetic acid feeding, 1127
Fatty acid esters of steroid hormones
Effect of clofibrate administration on the esterification and deesterification of steroid hormones by liver and extrahepatic tissues in rats, 985
Fatty acid metabolism
Effects of 5-iodotubercidin on hepatic fatty acid metabolism mediated by the inhibition of acetyl-CoA carboxylase, 1997
FCCP
Modulation of apoptosis by mitochondrial uncouplers: apoptosis-delaying features despite intrinsic cytotoxicity, 471
Ferritin light chain
Alterations in cellular Ca^{2+} and free iron pool by sulfur amino acid deprivation: the role of ferritin light chain down-regulation in prooxidant production, 647
Ferrylmyoglobin
Dimerumic acid as an antioxidant from the mold, *Monascus anka*: the inhibition mechanisms against lipid peroxidation and hemeprotein-mediated oxidation, 1019
Fetal/neonatal development
Developmental regulation of flavin-containing monooxygenase form 1 in the liver and kidney of fetal and neonatal rabbits, 1353
Fibroblast
Modifications of deoxycytidine kinase and deaminase activities by docosahexaenoic acid in normal and transformed rat fibroblasts, 717
FK506
A GAL4-based yeast three-hybrid system for the identification of small molecule–target protein interactions, 1619
Flavin-containing monooxygenase
Developmental regulation of flavin-containing monooxygenase form 1 in the liver and kidney of fetal and neonatal rabbits, 1353
Physiological factors affecting the expression of FMO1 and FMO3 in the rat liver and kidney, 1453
Flavobacterium heparinum lyases
Human neutrophil migration *in vitro* induced by secretory phospholipases A_2: a role for cell surface glycosaminoglycans, 65
Flavonoids
Wogonin and fisetin induce apoptosis in human promyeloleukemic cells, accompanied by a decrease of reactive oxygen species, and activation of caspase 3 and Ca^{2+}-dependent endonuclease, 225
Structure–activity relationships for inhibition of human 5α-reductases by polyphenols, 1165
(−)-Epicatechin effects in rat liver epithelial cells: stimulation of gap junctional communication and counteraction of its loss due to the tumor promoter 12-*O*-tetradecanoylphorbol-13-acetate, 2145

Flow cytometry
The modulation of the DNA-damaging effect of polycyclic aromatic agents by xanthines. Part I. Reduction of cytostatic effects of quinacrine mustard by caffeine, 625
Fluorescein
Fluorescein uptake by a monocarboxylic acid transporter in human intestinal Caco-2 cells, 81
5-Fluoroindole-3-acetic acid
5-Fluoroindole-3-acetic acid: a prodrug activated by a peroxidase with potential for use in targeted cancer therapy, 265
5-Fluorouracil activation
Pathways for α-D-ribose utilization for nucleobase salvage and 5-fluorouracil activation in rat brain, 117
FMO1
Developmental regulation of flavin-containing monooxygenase form 1 in the liver and kidney of fetal and neonatal rabbits, 1353
Folate homeostasis
Multiple mechanisms of resistance to methotrexate and novel antifolates in human CCRF-CEM leukemia cells and their implications for folate homeostasis, 105
Folylpolyglutamate synthetase
Multiple mechanisms of resistance to methotrexate and novel antifolates in human CCRF-CEM leukemia cells and their implications for folate homeostasis, 105
Food intake
Leptin, gut, and food intake, 1579
N-Formyl-methionyl-leucyl-phenylalanine
Human neutrophil migration *in vitro* induced by secretory phospholipases A_2: a role for cell surface glycosaminoglycans, 65
Free fatty acids
Troglitazone does not protect rat pancreatic β cells against free fatty acid-induced cytotoxicity, 1281
Free radicals
Protection by ascorbic acid from denaturation and release of cytochrome *c*, alteration of mitochondrial membrane potential and activation of multiple caspases induced by H_2O_2, in human leukemia cells, 1325
ESR analysis of spin adducts of alkoxyl and lipid-derived radicals with the spin trap Trazon, 1465
Functionalized dextrans
Interaction of specifically chemically modified dextrans with transforming growth factor β1: potentiation of its biological activity, 129

G_2 phase
Induction of G_2/M arrest and inhibition of *c-myc* and *p53* transcription by WP631 in Jurkat T lymphocytes, 1251
G protein-coupled receptor
Association of dopamine D_3 receptors with actin-binding protein 280 (ABP-280), 859
GABA
Effects of the antidepressant/antipanic drug phenelzine and its putative metabolite phenylethylidenehydrazine on extracellular γ-aminobutyric acid levels in the striatum, 57
G-actin
Characterization of F-actin depolymerization as a major toxic event induced by pectenotoxin-6 in neuroblastoma cells, 1979
GAL4
A GAL4-based yeast three-hybrid system for the identification of small molecule–target protein interactions, 1619
Galanin
Leptin, gut, and food intake, 1579
Gap junctional communication
(−)-Epicatechin effects in rat liver epithelial cells: stimulation of gap junctional communication and counteraction of its loss due to the tumor promoter 12-*O*-tetradecanoylphorbol-13-acetate, 2145
Garlic
Induction of apoptosis by diallyl disulfide through activation of caspase-3 in human leukemia HL-60 cells, 41
Gastrointestinal tract
Leptin, gut, and food intake, 1579
Gel shift assay
Interaction of specifically chemically modified dextrans with transforming growth factor β1: potentiation of its biological activity, 129
Gene and protein expression
Induction of arginase II in livers of bile duct-ligated rats, 1043
Gene expression
Activation of transcription factors by drugs inducing oxidative stress in rat liver, 139
Clofibric acid down-regulation of metallothionein IIA in HepG2 human hepatoma cells, 237
Differentiation-dependent repression of c-*myc*, *B22*, *COX II* and *COX IV* genes in murine erythroleukemia (MEL) cells, 1009
Gene knockout mice
Relative importance of maternal and embryonic microsomal epoxide hydrolase in 7,12-dimethylbenz[*a*]anthracene-induced developmental toxicity, 1077
Genistein
(−)-Epicatechin effects in rat liver epithelial cells: stimulation of gap junctional communication and counteraction of its loss due to the tumor promoter 12-*O*-tetradecanoylphorbol-13-acetate, 2145
Geometrical selectivity
Reverse geometrical selectivity in glucuronidation and sulfation of *cis*- and *trans*-4-hydroxytamoxifens by human liver UDP-glucuronosyltransferases and sulfotransferases, 1817
GLP-1
Exendin-4 increases insulin sensitivity via a PI-3-kinase-dependent mechanism: contrasting effects of GLP-1, 993
Glucocorticoid receptor
A GAL4-based yeast three-hybrid system for the identification of small molecule–target protein interactions, 1619
Gluconeogenesis
Inhibition of gluconeogenesis by vanadium and metformin in kidney-cortex tubules isolated from control and diabetic rabbits, 1371
Glucose signaling
Carbohydrate responsive element-binding protein (ChREBP): a key regulator of glucose metabolism and fat storage, 2075
Glucuronidase
Verapamil decreases glucuronidase activity in the gut, 1575
Glucuronidation
Enhanced clearance of topoisomerase I inhibitors from human colon cancer cells by glucuronidation, 607
Glutamate
A glutamate-gated chloride channel subunit from *Haemonchus contortus*: Expression in a mammalian cell line, ligand binding, and modulation of anthelmintic binding by glutamate, 1061
Modulation of dendritic release of dopamine by metabotropic glutamate receptors in rat substantia nigra, 1343
Glutamate–cysteine ligase
Glutamate–cysteine ligase modifier subunit: mouse *Gclm* gene structure and regulation by agents that cause oxidative stress, 1739
Glutathione
Methionine synthase activity and sulphur amino acid levels in the rat liver tumour cells HTC and Phi-1, 381
Increased rate of glutathione synthesis from cystine in drug-resistant MCF-7 cells, 843
Glutamate–cysteine ligase modifier subunit: mouse *Gclm* gene structure and regulation by agents that cause oxidative stress, 1739
JM216-, JM118-, and cisplatin-induced cytotoxicity in relation to platinum-DNA adduct formation, glutathione levels and p53 status in human tumour cell lines with different sensitivities to cisplatin, 1989
Glutathione reductase
Drug-resistant human lung cancer cells are more sensitive to selenium cytotoxicity. Effects on thioredoxin reductase and glutathione reductase, 1875

Glutathione transferase
The polymorphic human glutathione transferase T1-1, the most efficient glutathione transferase in the denitrosation and inactivation of the anticancer drug 1,3-bis(2-chloroethyl)-1-nitrosourea, 191
Glutathione *S*-transferases
Induction of glutathione-*S*-transferase mRNA levels by chemopreventive selenocysteine *Se*-conjugates, 1843
Comparative expression of two alpha class glutathione *S*-transferases in human adult and prenatal liver tissues, 2025
Glycaemia
In vitro and *in vivo* effects of new insulin releasing agents, 515
Glycation
Identification of α-dicarbonyl scavengers for cellular protection against carbonyl stress, 361
Glyceraldehyde-3-phosphate dehydrogenase
Degradation of glyceraldehyde-3-phosphate dehydrogenase induced by acetylleucine chloromethyl ketone in U937 cells, 1857
Go6976
Involvement of the muscarinic acetylcholine receptor in inhibition of cell migration, 597
GPIIb/IIIa
Platelet α-granule secretion and its modification by SC-57101A, a GPIIb/IIIa antagonist, 1911
G-proteins
GTP-binding proteins in cell survival and demise: the emerging picture in the pancreatic β-cell, 1027
The direct stimulation of Gi proteins by neuropeptide Y (NPY) in the rat left ventricle, 2063
Identification and characterization of a novel protein histidine kinase in the islet β cell: evidence for its regulation by mastoparan, an activator of G-proteins and insulin secretion, 2091
α-Granule
Platelet α-granule secretion and its modification by SC-57101A, a GPIIb/IIIa antagonist, 1911
Green tea
Attenuation of 6-hydroxydopamine (6-OHDA)-induced nuclear factor-kappaB (NF-κB) activation and cell death by tea extracts in neuronal cultures, 21
Green tea catechins
Structure–activity relationships for inhibition of human 5α-reductases by polyphenols, 1165
Growth arrest
Jolkinolide B induces neuroendocrine differentiation of human prostate LNCaP cancer cell line, 951
Growth inhibitors
Cell-impermeant pyridinium derivatives of psoralens as inhibitors of keratinocyte growth, 31
Guanylate cyclase
Effect of isatin on nitric oxide-stimulated soluble guanylate cyclase from human platelets, 763
Guinea pig
Comparison of inhibition of ovalbumin-induced bronchoconstriction in guinea pigs and *in vitro* inhibition of tumor necrosis factor-α formation with phosphodiesterase 4 (PDE4) selective inhibitors, 1527

H7
Effects of dexamethasone and protein kinase C inhibitors on the induction of bradykinin B_1 mRNA and the bradykinin B_1 receptor-mediated contractile response in isolated rat ileum, 2043
HaCat keratinocytes
Sensitivity of HaCat keratinocytes to diabetogenic toxins, 171
Identification of α-dicarbonyl scavengers for cellular protection against carbonyl stress, 361
Haem
Novel phenothiazine antimalarials: synthesis, antimalarial activity, and inhibition of the formation of β-haematin, 833
Heart
3-Isobutyl-1-methylxanthine (IBMX) sensitizes cardiac myocytes to anoxia, 2055
Heart metabolism
The direct stimulation of Gi proteins by neuropeptide Y (NPY) in the rat left ventricle, 2063
Heparin
The influence of charge clustering on the anti-HIV-1 activity and *in vivo* distribution of negatively charged albumins, 1663
Hepatic steatosis
Toxicological consequences of altered peroxisome proliferator-activated receptor γ (PPARγ) expression in the liver: insights from models of obesity and type 2 diabetes, 1
Hepatic stellate cells
Effect of malondialdehyde–acetaldehyde–protein adducts on the protein kinase C-dependent secretion of urokinase-type plasminogen activator in hepatic stellate cells, 553
Inhibition of hepatic stellate cell collagen synthesis by *N*-(methylamino)isobutyric acid, 697
Hepatocyte
Differential regulation of multidrug resistance-associated protein 2 (MRP2) and cytochromes P450 2B1/2 and 3A1/2 in phenobarbital-treated hepatocytes, 333
Effects of 5-iodotubercidin on hepatic fatty acid metabolism mediated by the inhibition of acetyl-CoA carboxylase, 1997
Coordinate regulation of UDP-glucuronosyltransferase UGT1A6 induction by 3-methylcholanthrene and multidrug resistance protein MRP2 expression by dexamethasone in primary rat hepatocytes, 2137
Hepatocytes
Methionine synthase activity and sulphur amino acid levels in the rat liver tumour cells HTC and Phi-1, 381
Inhibition of gluconeogenesis by vanadium and metformin in kidney-cortex tubules isolated from control and diabetic rabbits, 1371
HepG2 cells
Resistance of HepG2 cells against the adverse effects of ethanol related to neutral lipid and phospholipid metabolism, 1485
Heterometrus spinifer
Biochemical and pharmacological characterization of the venom of the black scorpion *Heterometrus spinifer*, 49
HIF-1
Activation of transcription factors by drugs inducing oxidative stress in rat liver, 139
Hippuric acid
Effect of protein-bound uraemic toxins on the thermodynamic characteristics of human albumin, 1287
Histamine receptors
Regulation of phospholipase C activation by the number of H_2 receptors during Ca^{2+}-induced differentiation of mouse keratinocytes, 1785
Histidine phosphorylation
Identification and characterization of a novel protein histidine kinase in the islet β cell: evidence for its regulation by mastoparan, an activator of G-proteins and insulin secretion, 2091
HIV-1
κ-Opioid receptor agonist inhibition of HIV-1 envelope glycoprotein-mediated membrane fusion and CXCR4 expression on $CD4^+$ lymphocytes, 1037
HIV
The influence of charge clustering on the anti-HIV-1 activity and *in vivo* distribution of negatively charged albumins, 1663
HIV protease
Ritonavir inhibition of calcium-activated neutral proteases, 1481
HIV-1 protease
Metal-organic compounds: a new approach for drug discovery. *N*1-(4-methyl-2-pyridyl)-2,3,6-trimethoxybenzamide copper(II) complex as an inhibitor of human immunodeficiency virus 1 protease, 1863
HL-60
In vitro induction of apoptosis vs. necrosis by widely used preservatives: 2-phenoxyethanol, a mixture of isothiazolinones, imidazolidinyl urea and 1,2-pentanediol, 437

p53-Independent induction of Fas and apoptosis in leukemic cells by an adenosine derivative, Cl-IB-MECA, 871
HL-60 cell
Induction of apoptosis by diallyl disulfide through activation of caspase-3 in human leukemia HL-60 cells, 41
H_2O_2
Hydrogen peroxide-induced current in *Xenopus* oocytes: current characteristics similar to those induced by the removal of extracellular calcium, 569
HOE 402
HOE 402 lowers serum cholesterol levels by reducing VLDL-lipid production, and not by induction of the LDL receptor, and reduces atherosclerosis in wild-type and LDL receptor-deficient mice, 1755
Homocysteine
Methionine synthase activity and sulphur amino acid levels in the rat liver tumour cells HTC and Phi-1, 381
Tissue levels of *S*-adenosylhomocysteine in the rat kidney: effects of ischemia and homocysteine, 809
Homologous recombinational repair
Homologous recombinational repair vis-à-vis chlorambucil resistance in chronic lymphocytic leukemia, 1585
Honokiol
Down-modulation of Bcl-X_L, release of cytochrome *c* and sequential activation of caspases during honokiol-induced apoptosis in human squamous lung cancer CH27 cells, 1641
Horseradish peroxidase
5-Fluoroindole-3-acetic acid: a prodrug activated by a peroxidase with potential for use in targeted cancer therapy, 265
Lipid peroxidation induced by indomethacin with horseradish peroxidase and hydrogen peroxide: involvement of indomethacin radicals, 2069
HPLC
Effects of the antidepressant/antipanic drug phenelzine and its putative metabolite phenylethylidenehydrazine on extracellular γ-aminobutyric acid levels in the striatum, 57
huFMO 1
Thiourea toxicity in mouse C3H/10T½ cells expressing human flavin-dependent monooxygenase 3, 1941
huFMO 3
Thiourea toxicity in mouse C3H/10T½ cells expressing human flavin-dependent monooxygenase 3, 1941
Human
Identification of catalase in human livers as a factor that enhances phenytoin dihydroxy metabolite formation by human liver microsomes, 2081
Human autopsy
Associations between human liver and kidney cadmium content and immunochemically detected CYP4A11 apoprotein, 693
Human bladder cancer cells
The signalling pathway for BCG-induced interleukin-6 production in human bladder cancer cells, 273
Human colon
Structure-activity relationship of neurokinin A(4–10) at the human tachykinin NK_2 receptor: the effect of amino acid substitutions on receptor affinity and function, 2181
Human colon cancer cells
Enhanced clearance of topoisomerase I inhibitors from human colon cancer cells by glucuronidation, 607
Human glioblastoma
Fas/CD95-mediated apoptosis in human glioblastoma cells: a target for sensitisation to topoisomerase I inhibitors, 881
Human hepatoma cells
Clofibric acid down-regulation of metallothionein IIA in HepG2 human hepatoma cells, 237
Human leukocyte
Regulatory effects of deoxycholic acid, a component of the anti-inflammatory traditional Chinese medicine Niuhuang, on human leukocyte response to chemoattractants, 533
Human liver cytosol
Reverse geometrical selectivity in glucuronidation and sulfation of *cis*- and *trans*-4-hydroxytamoxifens by human liver UDP-glucuronosyltransferases and sulfotransferases, 1817
Human liver microsomes
Reverse geometrical selectivity in glucuronidation and sulfation of *cis*- and *trans*-4-hydroxytamoxifens by human liver UDP-glucuronosyltransferases and sulfotransferases, 1817
Human lung parenchyma
Pharmacological differences among $CysLT_1$ receptor antagonists with respect to LTC_4 and LTD_4 in human lung parenchyma, 1537
Human MAO A
Phentermine inhibition of recombinant human liver monoamine oxidases A and B, 865
Human MAO B
Phentermine inhibition of recombinant human liver monoamine oxidases A and B, 865
Human ovarian
Overexpression of sorcin, a calcium-binding protein, induces a low level of paclitaxel resistance in human ovarian and breast cancer cells, 1149
Human ovarian cancer cells
Variation in the kinetics of caspase-3 activation, Bcl-2 phosphorylation and apoptotic morphology in unselected human ovarian cancer cell lines as a response to docetaxel, 733
Huntington's disease
Mitochondrial toxin inhibition of [^{3}H]dopamine uptake into rat striatal synaptosomes, 1499
Hydrogen peroxide
Identification of catalase in human livers as a factor that enhances phenytoin dihydroxy metabolite formation by human liver microsomes, 2081
4-Hydroxy-cyclophosphamide
Stem cell toxicity of oxazaphosphorine metabolites in comparison to their antileukemic activity, 1337
6-hydroxydopamine
Attenuation of 6-hydroxydopamine (6-OHDA)-induced nuclear factor-kappaB (NF-κB) activation and cell death by tea extracts in neuronal cultures, 21
Monoamine neurotoxins-induced apoptosis in lymphocytes by a common oxidative stress mechanism: involvement of hydrogen peroxide (H_2O_2), caspase-3, and nuclear factor kappa-B (NF-κB), p53, c-Jun transcription factors, 677
4-Hydroxy-ifosfamide
Stem cell toxicity of oxazaphosphorine metabolites in comparison to their antileukemic activity, 1337
7-Hydroxy-4-methylcoumarin
Modifying rates of reductive elimination of leaving groups from indolequinone prodrugs: a key factor in controlling hypoxia-selective drug release, 1629
4-Hydroxynonenal
Comparative expression of two alpha class glutathione *S*-transferases in human adult and prenatal liver tissues, 2025
4-Hydroxytamoxifen
Reverse geometrical selectivity in glucuronidation and sulfation of *cis*- and *trans*-4-hydroxytamoxifens by human liver UDP-glucuronosyltransferases and sulfotransferases, 1817
Hypertension
Associations between human liver and kidney cadmium content and immunochemically detected CYP4A11 apoprotein, 693
Hypophysectomy
Sexual dimorphic expression of mouse hepatic CYP2B: alterations during development or after hypophysectomy, 2037
Hypotension
Characterization of the mechanism underlying stonustoxin-mediated relaxant response in the rat aorta *in vitro*, 1113
Hypoxia
Identification of the phospholipase A_2 isoforms that contribute to arachidonic acid release in hypoxic endothelial cells: limits of phospholipase A_2 inhibitors, 321

Modifying rates of reductive elimination of leaving groups from indolequinone prodrugs: a key factor in controlling hypoxia-selective drug release, 1629

Idarubicin
Formation and longevity of idarubicin-induced DNA topoisomerase II cleavable complexes in K562 human leukaemia cells, 1807
Imidazoacridinones
Intercalation of imidazoacridinones to DNA and its relevance to cytotoxic and antitumor activity, 1653
Imidazolines
Desensitization of insulin secretion, 1921
Immune response
Structural refinement of inhibitors of urea-based soluble epoxide hydrolases, 1599
Immunohistochemistry
UDP-glucuronosyltransferase activity, expression and cellular localization in human placenta at term, 409
Immunomodulation
Involvement of the peroxisome proliferator-activated receptor alpha in the immunomodulation caused by peroxisome proliferators in mice, 1885
Immunopharmacology
The involvement of L-γ-glutamyl-L-cysteinyl-glycine (glutathione/GSH) in the mechanism of redox signaling mediating $MAPK^{p38}$-dependent regulation of pro-inflammatory cytokine production, 305
Immunosuppression
Reduction of acute photodamage in skin by topical application of a novel PARP inhibitor, 921
In vivo microdialysis
Effects of the antidepressant/antipanic drug phenelzine and its putative metabolite phenylethylidenehydrazine on extracellular γ-aminobutyric acid levels in the striatum, 57
Inactivation
Inhibition of crotoxin phospholipase A_2 activity by manoalide associated with inactivation of crotoxin toxicity and dissociation of the heterodimeric neurotoxic complex, 755
Individual variability
Bleomycin genotoxicity and amifostine (WR-2721) cell protection in normal leukocytes vs. K562 tumoral cells, 967
Indole-3-acetic acid
5-Fluoroindole-3-acetic acid: a prodrug activated by a peroxidase with potential for use in targeted cancer therapy, 265
Indolequinone
Modifying rates of reductive elimination of leaving groups from indolequinone prodrugs: a key factor in controlling hypoxia-selective drug release, 1629
Indomethacin
Lipid peroxidation induced by indomethacin with horseradish peroxidase and hydrogen peroxide: involvement of indomethacin radicals, 2069
Indoxyl sulphate
Effect of protein-bound uraemic toxins on the thermodynamic characteristics of human albumin, 1287
Inducible nitric oxide synthase
Effects of sanguiin H-6, a component of Sanguisorbae Radix, on lipopolysaccharide-stimulated nitric oxide production, 853
Inhibition of lipopolysaccharide-stimulated nitric oxide production in RAW 264.7 macrophages by a synthetic carbazole, LCY-2-CHO, 1961
Induction
Induction of UDP-glucuronosyltransferase 1A8 mRNA by 3-methylcholanthene in rat hepatoma cells, 767
Induction of estradiol esterification
Effect of clofibrate administration on the esterification and deesterification of steroid hormones by liver and extrahepatic tissues in rats, 985
Induction of testosterone esterification
Effect of clofibrate administration on the esterification and deesterification of steroid hormones by liver and extrahepatic tissues in rats, 985
Inflammation
Inhibition of inducible prostaglandin E_2 synthase by 15-deoxy-$\Delta^{12,14}$-prostaglandin J_2 and polyunsaturated fatty acids, 1183
Chemokines as novel therapeutic targets in inflammatory diseases, 1191
Inflammatory diseases
Chemokines as novel therapeutic targets in inflammatory diseases, 1191
Inhibition
Metal-organic compounds: a new approach for drug discovery. *N*1-(4-methyl-2-pyridyl)-2,3,6-trimethoxybenzamide copper(II) complex as an inhibitor of human immunodeficiency virus 1 protease, 1863
Inhibition of glycolysis
Anti-cancer action of 4-iodo-3-nitrobenzamide in combination with buthionine sulfoximine: inactivation of poly(ADP-ribose) polymerase and tumor glycolysis and the appearance of a poly(ADP-ribose) polymerase protease, 455
Inhibitor 1
Inhibition of type 1 protein phosphatase activity by activation of β-adrenoceptors in ventricular myocardium, 1069
Insulin release
In vitro and *in vivo* effects of new insulin releasing agents, 515
Insulin secretion
Desensitization of insulin secretion, 1921
Identification and characterization of a novel protein histidine kinase in the islet β cell: evidence for its regulation by mastoparan, an activator of G-proteins and insulin secretion, 2091
Insulin sensitivity
Exendin-4 increases insulin sensitivity via a PI-3-kinase-dependent mechanism: contrasting effects of GLP-1, 993
Interaction
Interaction of specifically chemically modified dextrans with transforming growth factor β1: potentiation of its biological activity, 129
Verapamil decreases glucuronidase activity in the gut, 1575
Intercellular adhesion molecule-1
Inhibitory effect of adrenomedullin on basal and tumour necrosis factor alpha-stimulated endothelin-1 synthesis in bovine aortic endothelial cells is independent of cyclic AMP, 149
Interferon-γ
Selective inhibition of STAT3 phosphorylation by sodium salicylate in cardiac fibroblasts, 1197
Interleukin-6
The signalling pathway for BCG-induced interleukin-6 production in human bladder cancer cells, 273
Interleukin-12
Involvement of p38 mitogen-activated protein kinase in the induction of interleukin-12 p40 production in mouse macrophages by berberine, a benzodioxoloquinolizine alkaloid, 1901
Intestinal absorption
Fluorescein uptake by a monocarboxylic acid transporter in human intestinal Caco-2 cells, 81
Intestinal pharmacokinetics
Verapamil decreases glucuronidase activity in the gut, 1575
Intestine
Structure–activity studies of bufokinin, substance P and their C-terminal fragments at bufokinin receptors in the small intestine of the cane toad, *Bufo marinus*, 217
4-Iodo-3-nitrobenzamide reduction
Anti-cancer action of 4-iodo-3-nitrobenzamide in combination with buthionine sulfoximine: inactivation of poly(ADP-ribose) polymerase and tumor glycolysis and the appearance of a poly(ADP-ribose) polymerase protease, 455
Iodotubercidin
Effects of 5-iodotubercidin on hepatic fatty acid metabolism mediated by the inhibition of acetyl-CoA carboxylase, 1997
Ion channel
A glutamate-gated chloride channel subunit from *Haemonchus contortus*: Expression in a mammalian cell line, ligand binding, and modulation of anthelmintic binding by glutamate, 1061

Iron
Attenuation of 6-hydroxydopamine (6-OHDA)-induced nuclear factor-kappaB (NF-κB) activation and cell death by tea extracts in neuronal cultures, 21
Iron dithiocarbamate complex
In vivo nitric oxide transfer of a physiological NO carrier, dinitrosyl dithiolato iron complex, to target complex, 485
Isatin
Effect of isatin on nitric oxide-stimulated soluble guanylate cyclase from human platelets, 763
Ischemia
Mitochondrial gene expression and ventricular fibrillation in ischemic/reperfused nondiabetic and diabetic myocardium, 543
ISIS 10582
Reversal of cisplatin resistance in human ovarian cancer cell lines by a c-*jun* antisense oligodeoxynucleotide (ISIS 10582): evidence for the role of transcription factor overexpression in determining resistant phenotype, 1699
Islets of Langerhans
Troglitazone does not protect rat pancreatic β cells against free fatty acid-induced cytotoxicity, 1281
3-Isobutyl-1-methylxanthine
3-Isobutyl-1-methylxanthine (IBMX) sensitizes cardiac myocytes to anoxia, 2055
Isoeicosanoids
Alzheimer's disease and oxygen radicals: new insights, 563
Isolated heart
Mitochondrial gene expression and ventricular fibrillation in ischemic/reperfused nondiabetic and diabetic myocardium, 543
Isomerisation
Influence of isomerisation on the growth inhibitory effects and cellular activity of 13-*cis* and all-*trans* retinoic acid in neuroblastoma cells, 207
Isoproterenol
Inhibition of type 1 protein phosphatase activity by activation of β-adrenoceptors in ventricular myocardium, 1069
Isoquinoline derivatives
Selective dopaminergic neurotoxicity of isoquinoline derivatives related to Parkinson's disease: studies using heterologous expression systems of the dopamine transporter, 909
Ivermectin
A glutamate-gated chloride channel subunit from *Haemonchus contortus*: Expression in a mammalian cell line, ligand binding, and modulation of anthelmintic binding by glutamate, 1061

JM118
JM216-, JM118-, and cisplatin-induced cytotoxicity in relation to platinum-DNA adduct formation, glutathione levels and p53 status in human tumour cell lines with different sensitivities to cisplatin, 1989
JM216
JM216-, JM118-, and cisplatin-induced cytotoxicity in relation to platinum-DNA adduct formation, glutathione levels and p53 status in human tumour cell lines with different sensitivities to cisplatin, 1989
Jolkinolide B
Jolkinolide B induces neuroendocrine differentiation of human prostate LNCaP cancer cell line, 951
Jurkat cells
Induction of G_2/M arrest and inhibition of *c-myc* and *p53* transcription by WP631 in Jurkat T lymphocytes, 1251

K562 cells
Formation and longevity of idarubicin-induced DNA topoisomerase II cleavable complexes in K562 human leukaemia cells, 1807
K^+ channel
Characterization of the mechanism underlying stonustoxin-mediated relaxant response in the rat aorta *in vitro*, 1113
K_{ATP} channels
Desensitization of insulin secretion, 1921
Keratinocytes
Regulation of phospholipase C activation by the number of H_2 receptors during Ca^{2+}-induced differentiation of mouse keratinocytes, 1785
Mechanisms of growth inhibition in keratinocytes by mercurio-substituted 4′,5′-dihydropsoralens, 2001
Ketone body
Effects of streptozotocin-induced diabetes on acetoacetyl-CoA synthetase activity in rats, 1851
Kidney
Physiological factors affecting the expression of FMO1 and FMO3 in the rat liver and kidney, 1453

L6 myotubes
Exendin-4 increases insulin sensitivity via a PI-3-kinase-dependent mechanism: contrasting effects of GLP-1, 993
Lachesis muta venom
Purification and characterization of a phospholipase A_2 isoenzyme isolated from *Lachesis muta* snake venom, 1589
L-Arginine
Evidence for the involvement of L-citrulline but not nitric oxide in the proconvulsant action of the precursor L-arginine on picrotoxin-induced convulsions in rats, 2019
L-Citrulline
Evidence for the involvement of L-citrulline but not nitric oxide in the proconvulsant action of the precursor L-arginine on picrotoxin-induced convulsions in rats, 2019
LCY-2-CHO
Inhibition of lipopolysaccharide-stimulated nitric oxide production in RAW 264.7 macrophages by a synthetic carbazole, LCY-2-CHO, 1961
LDL receptor
HOE 402 lowers serum cholesterol levels by reducing VLDL-lipid production, and not by induction of the LDL receptor, and reduces atherosclerosis in wild-type and LDL receptor-deficient mice, 1755
LDL receptor knock-out mice
HOE 402 lowers serum cholesterol levels by reducing VLDL-lipid production, and not by induction of the LDL receptor, and reduces atherosclerosis in wild-type and LDL receptor-deficient mice, 1755
LDL-clearance
HOE 402 lowers serum cholesterol levels by reducing VLDL-lipid production, and not by induction of the LDL receptor, and reduces atherosclerosis in wild-type and LDL receptor-deficient mice, 1755
Leptin
Leptin, gut, and food intake, 1579
Leukaemia
Reduced DNA ligase activity in etoposide resistant human lymphatic leukaemia CEM cells, 259
Formation and longevity of idarubicin-induced DNA topoisomerase II cleavable complexes in K562 human leukaemia cells, 1807
Leukemia
Matrix and serine protease expression during leukemic cell differentiation induced by aclacinomycin and all-*trans*-retinoic acid, 179
Mechanisms of apoptosis by the tyrphostin AG957 in hematopoietic cells, 689
Elevated uptake of low density lipoprotein by drug resistant human leukemic cell lines, 2169
Leukocytes
Chemokines as novel therapeutic targets in inflammatory diseases, 1191
Leukotriene B_4
Human neutrophil migration *in vitro* induced by secretory phospholipases A_2: a role for cell surface glycosaminoglycans, 65
Ligand–receptor binding
Regulatory effects of deoxycholic acid, a component of the anti-inflammatory traditional Chinese medicine Niuhuang, on human leukocyte response to chemoattractants, 533
Light absorption spectroscopy
The modulation of the DNA-damaging effect of polycyclic aromatic agents by xanthines. Part I. Reduction of cytostatic effects of quinacrine mustard by caffeine, 625

The modulation by xanthines of the DNA-damaging effect of polycyclic aromatic agents. Part II. The stacking complexes of caffeine with doxorubicin and mitoxantrone, 635
Linoleic acid hydroperoxide
ESR analysis of spin adducts of alkoxyl and lipid-derived radicals with the spin trap Trazon, 1465
Lipid metabolism
Resistance of HepG2 cells against the adverse effects of ethanol related to neutral lipid and phospholipid metabolism, 1485
Lipid peroxidation
Dimerumic acid as an antioxidant from the mold, *Monascus anka*: the inhibition mechanisms against lipid peroxidation and hemeprotein-mediated oxidation, 1019
ESR analysis of spin adducts of alkoxyl and lipid-derived radicals with the spin trap Trazon, 1465
Antioxidant properties of Thonningianin A, isolated from the African medicinal herb, *Thonningia sanguinea*, 1725
Lipid peroxidation induced by indomethacin with horseradish peroxidase and hydrogen peroxide: involvement of indomethacin radicals, 2069
Lipogenesis
Carbohydrate responsive element-binding protein (ChREBP): a key regulator of glucose metabolism and fat storage, 2075
Lipoperoxidation
Vanadyl as a catalyst of human lipoprotein oxidation, 375
Lipophilicity
Recognition forces involved in mitochondrial binding to a low-affinity trimetazidine binding site related to anti-ischemic activity, 1691
Lipopolysaccharide
Involvement of p38 mitogen-activated protein kinase in the induction of interleukin-12 p40 production in mouse macrophages by berberine, a benzodioxoloquinolizine alkaloid, 1901
Lipoprotein oxidation
Vanadyl as a catalyst of human lipoprotein oxidation, 375
Inhibition of rat lipoprotein oxidation after tetradecylthioacetic acid feeding, 1127
Lipoproteins
Intracellular mechanisms mediating the inhibition of apoB-containing lipoprotein synthesis and secretion in HepG2 cells by avasimibe (CI-1011), a novel acyl-coenzyme A: cholesterol acyltransferase (ACAT) inhibitor, 349
Liposomes
Recognition forces involved in mitochondrial binding to a low-affinity trimetazidine binding site related to anti-ischemic activity, 1691
Lipotoxicity
Troglitazone does not protect rat pancreatic β cells against free fatty acid-induced cytotoxicity, 1281
Liver
Toxicological consequences of altered peroxisome proliferator-activated receptor γ (PPARγ) expression in the liver: insights from models of obesity and type 2 diabetes, 1
Activation of transcription factors by drugs inducing oxidative stress in rat liver, 139
Intracellular mechanisms mediating the inhibition of apoB-containing lipoprotein synthesis and secretion in HepG2 cells by avasimibe (CI-1011), a novel acyl-coenzyme A: cholesterol acyltransferase (ACAT) inhibitor, 349
Investigations on the effects of oltipraz on the nucleotide excision repair in the liver, 745
Chronic ethanol administration decreases the ligand binding properties and the cellular content of the mannose 6-phosphate/insulin-like growth factor II receptor in rat hepatocytes, 1229
Physiological factors affecting the expression of FMO1 and FMO3 in the rat liver and kidney, 1453
Identification of catalase in human livers as a factor that enhances phenytoin dihydroxy metabolite formation by human liver microsomes, 2081
Liver and intestine
Tissue-specific regulation of canine intestinal and hepatic phenol and morphine UDP-glucuronosyltransferases by β-naphthoflavone in comparison with humans, 1683
Liver cirrhosis
Induction of arginase II in livers of bile duct-ligated rats, 1043
Liver fibrosis
Inhibition of hepatic stellate cell collagen synthesis by *N*-(methylamino)isobutyric acid, 697
LM-1484
Pharmacological differences among $CysLT_1$ receptor antagonists with respect to LTC_4 and LTD_4 in human lung parenchyma, 1537
LM-1507
Pharmacological differences among $CysLT_1$ receptor antagonists with respect to LTC_4 and LTD_4 in human lung parenchyma, 1537
L-NAME
Evidence for the involvement of L-citrulline but not nitric oxide in the proconvulsant action of the precursor L-arginine on picrotoxin-induced convulsions in rats, 2019
LNCaP
The effects of natural ligands of hormone receptors and their antagonists on telomerase activity in the androgen sensitive prostatic cancer cell line LNCaP, 1177
Lobeline
A novel mechanism of action and potential use for lobeline as a treatment for psychostimulant abuse, 89
Losartan
Enhancement of phosphatidylcholine biosynthesis by angiotensin-(1–7) in the rat renal cortex, 507
Low carbohydrate diet
Chronic ethanol administration decreases the ligand binding properties and the cellular content of the mannose 6-phosphate/insulin-like growth factor II receptor in rat hepatocytes, 1229
Low density lipoprotein
Elevated uptake of low density lipoprotein by drug resistant human leukemic cell lines, 2169
L-type Ca^{2+} current
Inhibitory effect of the plant-extract osthole on L-type calcium current in NG108-15 neuronal cells, 199
Luciferase reporter construct
Interaction of specifically chemically modified dextrans with transforming growth factor β1: potentiation of its biological activity, 129
β-Lyase
Induction of glutathione-*S*-transferase mRNA levels by chemopreventive selenocysteine *Se*-conjugates, 1843
Lymphocyte
Modulation of apoptosis and improved redox metabolism with the use of a new antioxidant formula, 1305
Involvement of the peroxisome proliferator-activated receptor alpha in the immunomodulation caused by peroxisome proliferators in mice, 1885
Lysophosphatidylcholine
Purification and characterization of a phospholipase A_2 isoenzyme isolated from *Lachesis muta* snake venom, 1589
Lysosome
Chronic ethanol administration decreases the ligand binding properties and the cellular content of the mannose 6-phosphate/insulin-like growth factor II receptor in rat hepatocytes, 1229

MAA adducts
Effect of malondialdehyde–acetaldehyde–protein adducts on the protein kinase C-dependent secretion of urokinase-type plasminogen activator in hepatic stellate cells, 553
Macrophage
Effects of sanguiin H-6, a component of Sanguisorbae Radix, on lipopolysaccharide-stimulated nitric oxide production, 853
Involvement of p38 mitogen-activated protein kinase in the induction of interleukin-12 p40 production in mouse macrophages by berberine, a benzodioxoloquinolizine alkaloid, 1901

Protein kinase Cα-dependent increase in Ca^{2+}-independent phospholipase A_2 in membranes and arachidonic acid liberation in zymosan-stimulated macrophage-like $P388D_1$ cells, 1969
Malaria
Differential effects of 4-aminoquinoline-containing antimalarial drugs on hemoglobin digestion in *Plasmodium falciparum*-infected erythrocytes, 393
Novel phenothiazine antimalarials: synthesis, antimalarial activity, and inhibition of the formation of β-haematin, 833
Malonate
Mitochondrial toxin inhibition of [^{3}H]dopamine uptake into rat striatal synaptosomes, 1499
γ-Mangostin
Inhibition of cyclooxygenase and prostaglandin E_2 synthesis by γ-mangostin, a xanthone derivative in mangosteen, in C6 rat glioma cells, 73
Manoalide
Inhibition of crotoxin phospholipase A_2 activity by manoalide associated with inactivation of crotoxin toxicity and dissociation of the heterodimeric neurotoxic complex, 755
MAP kinases
Role of redox status on the activation of mitogen-activated protein kinase cascades by NSAIDs, 163
MAPEG
Inhibition of inducible prostaglandin E_2 synthase by 15-deoxy-$\Delta^{12,14}$-prostaglandin J_2 and polyunsaturated fatty acids, 1183
Marine natural product
Inhibition of tubulin polymerization by vitilevuamide, a bicyclic marine peptide, at a site distinct from colchicine, the vinca alkaloids, and dolastatin 10, 707
Mastoparan
Identification and characterization of a novel protein histidine kinase in the islet β cell: evidence for its regulation by mastoparan, an activator of G-proteins and insulin secretion, 2091
Matrix metalloproteinases
Effect of the new matrix metalloproteinase inhibitor RO-28-2653 on mitochondrial function, 725
MCF-7 breast tumour cells
Modifying rates of reductive elimination of leaving groups from indolequinone prodrugs: a key factor in controlling hypoxia-selective drug release, 1629
Mcl-1
Wogonin and fisetin induce apoptosis in human promyeloleukemic cells, accompanied by a decrease of reactive oxygen species, and activation of caspase 3 and Ca^{2+}-dependent endonuclease, 225
mdr1a
Modulation of *mdr1a* and *CYP3A* gene expression in the intestine and liver as possible cause of changes in the cyclosporin. A disposition kinetics by dexamethasone, 777
Medicinal herb
Antioxidant properties of Thonningianin A, isolated from the African medicinal herb, *Thonningia sanguinea*, 1725
Mefloquine
Differential effects of 4-aminoquinoline-containing antimalarial drugs on hemoglobin digestion in *Plasmodium falciparum*-infected erythrocytes, 393
MEL
Differentiation-dependent repression of c-*myc*, *B22*, *COX II* and *COX IV* genes in murine erythroleukemia (MEL) cells, 1009
Melanin
Tetrahydroisoquinoline derivatives of enkephalins: synthesis and properties, 1893
Melatonin
Dual coupling of MT_1 and MT_2 melatonin receptors to cyclic AMP and phosphoinositide signal transduction cascades and their regulation following melatonin exposure, 587
Membrane potential
Inhibitory effect of the plant-extract osthole on L-type calcium current in NG108-15 neuronal cells, 199
Membrane ruffling
Involvement of phosphatidylinositol-3-kinase in membrane ruffling induced by P-glycoprotein substrates in multidrug-resistant carcinoma cells, 959
Membrane transporters
Biochemical changes associated with a multidrug-resistant phenotype of a human glioma cell line with temozolomide-acquired resistance, 1219
Membranes
Distinct binding properties of the AT_1 receptor antagonist [^{3}H]candesartan to intact cells and membrane preparations, 1273
Menadione
Autoschizis: a novel cell death, 1773
Metabolism
Increased rate of glutathione synthesis from cystine in drug-resistant MCF-7 cells, 843
Human cytochrome P450s involved in the metabolism of 9-*cis*- and 13-*cis*-retinoic acids, 933
Verapamil decreases glucuronidase activity in the gut, 1575
Metabotropic
Modulation of dendritic release of dopamine by metabotropic glutamate receptors in rat substantia nigra, 1343
Metallothionein
Clofibric acid down-regulation of metallothionein IIA in HepG2 human hepatoma cells, 237
Metal-organic complexes
Metal-organic compounds: a new approach for drug discovery. *N*1-(4-methyl-2-pyridyl)-2,3,6-trimethoxybenzamide copper(II) complex as an inhibitor of human immunodeficiency virus 1 protease, 1863
Metformin
Obligatory role of membrane events in the regulatory effect of metformin on the respiratory chain function, 1259
Inhibition of gluconeogenesis by vanadium and metformin in kidney-cortex tubules isolated from control and diabetic rabbits, 1371
Methamphetamine
A novel mechanism of action and potential use for lobeline as a treatment for psychostimulant abuse, 89
Methionine dependence
Methionine synthase activity and sulphur amino acid levels in the rat liver tumour cells HTC and Phi-1, 381
Methionine synthase
Methionine synthase activity and sulphur amino acid levels in the rat liver tumour cells HTC and Phi-1, 381
Methotrexate
A GAL4-based yeast three-hybrid system for the identification of small molecule–target protein interactions, 1619
Role of the C-terminus and the long cytoplasmic loop in reduced folate carrier expression and function, 1717
N^6-methyladenosine
Differentiation-dependent repression of c-*myc*, *B22*, *COX II* and *COX IV* genes in murine erythroleukemia (MEL) cells, 1009
N-(Methylamino)isobutyric acid
Inhibition of hepatic stellate cell collagen synthesis by *N*-(methylamino)isobutyric acid, 697
Methylation potential
Tissue levels of *S*-adenosylhomocysteine in the rat kidney: effects of ischemia and homocysteine, 809
(±)-3,4-Methylenedioxymethamphetamine
Reduced (±)-3,4-methylenedioxymethamphetamine ("Ecstasy") metabolism with cytochrome P450 2D6 inhibitors and pharmacogenetic variants *in vitro*, 2111
3-Methylene-2-oxindole
5-Fluoroindole-3-acetic acid: a prodrug activated by a peroxidase with potential for use in targeted cancer therapy, 265
[3-Methyl-histidine^2]TRH
Pharmacologically distinct binding sites in rat brain for [^{3}H]thyrotropin-releasing hormone (TRH) and [^{3}H][3-methyl-histidine^2]TRH, 2197

1-Methyl-4-pyridinium (MPP^+)
Selective dopaminergic neurotoxicity of isoquinoline derivatives related to Parkinson's disease: studies using heterologous expression systems of the dopamine transporter, 909
4-Methylumbelliferone glucuronide
Influence of *t*-butylhydroquinone and β-naphthoflavone on formation and transport of 4-methylumbelliferone glucuronide in Caco-2/TC-7 cell monolayers, 123
MGBG
The effect of methylglyoxal-bis(guanylhydrazone) on mitochondrial Ca^{2+} fluxes, 247
Mice
Involvement of the peroxisome proliferator-activated receptor alpha in the immunomodulation caused by peroxisome proliferators in mice, 1885
Microcalorimetry
Toward RNase inhibitors: thermodynamics of 2′-CMP/RNase-A binding in multi-ion buffer, 1937
Microsomal epoxide hydrolase
Relative importance of maternal and embryonic microsomal epoxide hydrolase in 7,12-dimethylbenz[*a*]anthracene-induced developmental toxicity, 1077
Microsomal glutathione *S*-transferase
Regulation of microsomal and cytosolic glutathione *S*-transferase activities by *S*-nitrosylation, 1397
Microsomes
Identification of catalase in human livers as a factor that enhances phenytoin dihydroxy metabolite formation by human liver microsomes, 2081
Differences in caffeine and paraxanthine metabolism between human and murine CYP1A2, 2159
Mitochondria
The effect of methylglyoxal-bis(guanylhydrazone) on mitochondrial Ca^{2+} fluxes, 247
Role of mitochondria in Ca^{2+} oscillations and shape of Ca^{2+} signals in pancreatic acinar cells, 283
Alterations in the expression of cytochrome *c* oxidase subunits in doxorubicin-resistant leukemia K562 cells, 823
Differentiation-dependent repression of c-*myc*, *B22*, *COX II* and *COX IV* genes in murine erythroleukemia (MEL) cells, 1009
Induction of apoptosis in HL-60 leukemia and B16 melanoma cells by the acronycine derivative S23906-1, 1443
Recognition forces involved in mitochondrial binding to a low-affinity trimetazidine binding site related to anti-ischemic activity, 1691
Comparative expression of two alpha class glutathione *S*-transferases in human adult and prenatal liver tissues, 2025
Mitochondrial complex II
Thenoyltrifluoroacetone, a potent inhibitor of carboxylesterase activity, 751
Mitochondrial function
Obligatory role of membrane events in the regulatory effect of metformin on the respiratory chain function, 1259
Mitochondrial gene expression
Mitochondrial gene expression and ventricular fibrillation in ischemic/reperfused nondiabetic and diabetic myocardium, 543
Mitochondrial uncouplers
Modulation of apoptosis by mitochondrial uncouplers: apoptosis-delaying features despite intrinsic cytotoxicity, 471
MMPs
Matrix and serine protease expression during leukemic cell differentiation induced by aclacinomycin and all-*trans*-retinoic acid, 179
Mode of action
Differential effects of 4-aminoquinoline-containing antimalarial drugs on hemoglobin digestion in *Plasmodium falciparum*-infected erythrocytes, 393
Molecular model
A critical role for a tyrosine residue in the cannabinoid receptors for ligand recognition, 2121
Molecular modeling
The modulation of the DNA-damaging effect of polycyclic aromatic agents by xanthines. Part I. Reduction of cytostatic effects of quinacrine mustard by caffeine, 625
The modulation by xanthines of the DNA-damaging effect of polycyclic aromatic agents. Part II. The stacking complexes of caffeine with doxorubicin and mitoxantrone, 635
MOLT-4
p53-Independent induction of Fas and apoptosis in leukemic cells by an adenosine derivative, Cl-IB-MECA, 871
Monascus anka
Dimerumic acid as an antioxidant from the mold, *Monascus anka*: the inhibition mechanisms against lipid peroxidation and hemeprotein-mediated oxidation, 1019
Monocarboxylic acid transporter
Fluorescein uptake by a monocarboxylic acid transporter in human intestinal Caco-2 cells, 81
Monte Carlo/Stochastic Dynamics
A critical role for a tyrosine residue in the cannabinoid receptors for ligand recognition, 2121
Montelukast
Pharmacological differences among $CysLT_1$ receptor antagonists with respect to LTC_4 and LTD_4 in human lung parenchyma, 1537
Morphine glucuronidation
Tissue-specific regulation of canine intestinal and hepatic phenol and morphine UDP-glucuronosyltransferases by β-naphthoflavone in comparison with humans, 1683
Morphine-6-β-glucuronide
Verapamil decreases glucuronidase activity in the gut, 1575
Mouse *Gclm* gene regulation
Glutamate–cysteine ligase modifier subunit: mouse *Gclm* gene structure and regulation by agents that cause oxidative stress, 1739
Moxidectin
A glutamate-gated chloride channel subunit from *Haemonchus contortus*: Expression in a mammalian cell line, ligand binding, and modulation of anthelmintic binding by glutamate, 1061
m-RNA
The distribution of copper, zinc- and manganese-superoxide dismutase, and glutathione peroxidase messenger ribonucleic acid in rat basal ganglia, 1159
Induction of glutathione-*S*-transferase mRNA levels by chemopreventive selenocysteine *Se*-conjugates, 1843
MRP3
Influence of *t*-butylhydroquinone and β-naphthoflavone on formation and transport of 4-methylumbelliferone glucuronide in Caco-2/TC-7 cell monolayers, 123
MRP1
Preferential efflux by P-glycoprotein, but not MRP1, of compounds containing a free electron donor amine, 1471
MRP2
Coordinate regulation of UDP-glucuronosyltransferase UGT1A6 induction by 3-methylcholanthrene and multidrug resistance protein MRP2 expression by dexamethasone in primary rat hepatocytes, 2137
MT_1 melatonin receptor
Dual coupling of MT_1 and MT_2 melatonin receptors to cyclic AMP and phosphoinositide signal transduction cascades and their regulation following melatonin exposure, 587
MT_2 melatonin receptor
Dual coupling of MT_1 and MT_2 melatonin receptors to cyclic AMP and phosphoinositide signal transduction cascades and their regulation following melatonin exposure, 587
Multidrug resistance
Alterations in the expression of cytochrome *c* oxidase subunits in doxorubicin-resistant leukemia K562 cells, 823
Involvement of phosphatidylinositol-3-kinase in membrane ruffling induced by P-glycoprotein substrates in multidrug-resistant carcinoma cells, 959

Characterization of anthracenediones and their photoaffinity analogs, 1143
Preferential efflux by P-glycoprotein, but not MRP1, of compounds containing a free electron donor amine, 1471
Elevated uptake of low density lipoprotein by drug resistant human leukemic cell lines, 2169
Multidrug resistance-associated protein 2
Differential regulation of multidrug resistance-associated protein 2 (MRP2) and cytochromes P450 2B1/2 and 3A1/2 in phenobarbital-treated hepatocytes, 333
Multidrug-resistant cervical cells
The alkaloid sanguinarine is effective against multidrug resistance in human cervical cells *via* bimodal cell death, 1415
Muscarinic acetylcholine receptor
Involvement of the muscarinic acetylcholine receptor in inhibition of cell migration, 597
Mutation
A critical role for a tyrosine residue in the cannabinoid receptors for ligand recognition, 2121
Myocyte
3-Isobutyl-1-methylxanthine (IBMX) sensitizes cardiac myocytes to anoxia, 2055
Myotoxicity
Purification and characterization of a phospholipase A_2 isoenzyme isolated from *Lachesis muta* snake venom, 1589

NAD^+
Modulation of apoptosis by mitochondrial uncouplers: apoptosis-delaying features despite intrinsic cytotoxicity, 471
NADH-ubiquinone oxidoreductase
Differentiation-dependent repression of c-*myc*, *B22*, *COX II* and *COX IV* genes in murine erythroleukemia (MEL) cells, 1009
NADPH: cytochrome P450 reductase
Modifying rates of reductive elimination of leaving groups from indolequinone prodrugs: a key factor in controlling hypoxia-selective drug release, 1629
β-Naphthoflavone
Influence of *t*-butylhydroquinone and β-naphthoflavone on formation and transport of 4-methylumbelliferone glucuronide in Caco-2/TC-7 cell monolayers, 123
Tissue-specific regulation of canine intestinal and hepatic phenol and morphine UDP-glucuronosyltransferases by β-naphthoflavone in comparison with humans, 1683
Necrosis
Sensitivity of HaCat keratinocytes to diabetogenic toxins, 171
In vitro induction of apoptosis vs. necrosis by widely used preservatives: 2-phenoxyethanol, a mixture of isothiazolinones, imidazolidinyl urea and 1,2-pentanediol, 437
Nephrotoxicity
BGP-15 — a novel poly(ADP-ribose) polymerase inhibitor — protects against nephrotoxicity of cisplatin without compromising its antitumor activity, 1099
Neuroblastoma
Influence of isomerisation on the growth inhibitory effects and cellular activity of 13-*cis* and all-*trans* retinoic acid in neuroblastoma cells, 207
Characterization of F-actin depolymerization as a major toxic event induced by pectenotoxin-6 in neuroblastoma cells, 1979
Neuroendocrine differentiation
Jolkinolide B induces neuroendocrine differentiation of human prostate LNCaP cancer cell line, 951
Neurokinin A
Structure-activity relationship of neurokinin A(4–10) at the human tachykinin NK_2 receptor: the effect of amino acid substitutions on receptor affinity and function, 2181
Neuronal cell death
Neuronal cell death induced by antidepressants: lack of correlation with Egr-1, NF-κB and extracellular signal-regulated protein kinase activation, 1507
Neuropeptide
Analysis of C-terminally substituted tachykinin-like peptide agonists by means of aequorin-based luminescent assays for human and insect neurokinin receptors, 1675
Neurotoxin
Selective dopaminergic neurotoxicity of isoquinoline derivatives related to Parkinson's disease: studies using heterologous expression systems of the dopamine transporter, 909
Neurotransmitter receptor
A glutamate-gated chloride channel subunit from *Haemonchus contortus*: Expression in a mammalian cell line, ligand binding, and modulation of anthelmintic binding by glutamate, 1061
Neutrophil
Inhibition of superoxide anion generation by YC-1 in rat neutrophils through cyclic GMP-dependent and -independent mechanisms, 577
Neutrophil chemotaxis
Human neutrophil migration *in vitro* induced by secretory phospholipases A_2: a role for cell surface glycosaminoglycans, 65
NF-κB
Increase of the resistance of human cervical carcinoma cells to cisplatin by inhibition of the MEK to ERK signaling pathway partly *via* enhancement of anticancer drug-induced NFκB activation, 1423
Neuronal cell death induced by antidepressants: lack of correlation with Egr-1, NF-κB and extracellular signal-regulated protein kinase activation, 1507
Basal levels and patterns of anticancer drug-induced activation of nuclear factor-κB (NF-κB), and its attenuation by tamoxifen, dexamethasone, and curcumin in carcinoma cells, 1709
Inhibition of lipopolysaccharide-stimulated nitric oxide production in RAW 264.7 macrophages by a synthetic carbazole, LCY-2-CHO, 1961
NF-H
Protein levels of neurofilament subunits in the hen central nervous system following prevention and potentiation of diisopropyl phosphorofluoridate (DFP)-induced delayed neurotoxicity, 11
NF-L
Protein levels of neurofilament subunits in the hen central nervous system following prevention and potentiation of diisopropyl phosphorofluoridate (DFP)-induced delayed neurotoxicity, 11
NF-M
Protein levels of neurofilament subunits in the hen central nervous system following prevention and potentiation of diisopropyl phosphorofluoridate (DFP)-induced delayed neurotoxicity, 11
NG105-18 cells
Inhibitory effect of the plant-extract osthole on L-type calcium current in NG108-15 neuronal cells, 199
Ni^{2+}
Effects of Ca^{2+} channel blockers on amiloride-sensitive Na^+ permeable channels and Na^+ transport in fetal rat alveolar type II epithelium, 1547
Nicotine
A novel mechanism of action and potential use for lobeline as a treatment for psychostimulant abuse, 89
Nifedipine
Effects of Ca^{2+} channel blockers on amiloride-sensitive Na^+ permeable channels and Na^+ transport in fetal rat alveolar type II epithelium, 1547
Nitric oxide
In vivo nitric oxide transfer of a physiological NO carrier, dinitrosyl dithiolato iron complex, to target complex, 485
Effect of isatin on nitric oxide-stimulated soluble guanylate cyclase from human platelets, 763
Effects of sanguiin H-6, a component of Sanguisorbae Radix, on lipopolysaccharide-stimulated nitric oxide production, 853
Induction of arginase II in livers of bile duct-ligated rats, 1043
Characterization of the mechanism underlying stonustoxin-mediated relaxant response in the rat aorta *in vitro*, 1113
Lack of involvement of extracellular signal-regulated kinase (ERK) in the agonist-induced endothelial nitric oxide synthesis, 1137
Inhibition of lipopolysaccharide-stimulated nitric oxide production in RAW 264.7 macrophages by a synthetic carbazole, LCY-2-CHO, 1961

Nitrogen mustards
Homologous recombinational repair vis-à-vis chlorambucil resistance in chronic lymphocytic leukemia, 1585
3-Nitropropionic acid
Mitochondrial toxin inhibition of [^{3}H]dopamine uptake into rat striatal synaptosomes, 1499
S-Nitrosoglutathione
Regulation of microsomal and cytosolic glutathione *S*-transferase activities by *S*-nitrosylation, 1397
S-Nitrosylation
Regulation of microsomal and cytosolic glutathione *S*-transferase activities by *S*-nitrosylation, 1397
Nitroxide radical
Dimerumic acid as an antioxidant from the mold, *Monascus anka*: the inhibition mechanisms against lipid peroxidation and hemeprotein-mediated oxidation, 1019
NK_2 receptor
Structure-activity relationship of neurokinin A(4–10) at the human tachykinin NK_2 receptor: the effect of amino acid substitutions on receptor affinity and function, 2181
NO
Evidence for the involvement of L-citrulline but not nitric oxide in the proconvulsant action of the precursor L-arginine on picrotoxin-induced convulsions in rats, 2019
Non-peptide antagonist
Distinct binding properties of the AT_1 receptor antagonist [^{3}H]candesartan to intact cells and membrane preparations, 1273
Nonselective cation channel
Effects of Ca^{2+} channel blockers on amiloride-sensitive Na^+ permeable channels and Na^+ transport in fetal rat alveolar type II epithelium, 1547
Nonsteroidal anti-inflammatory drug
Selective inhibition of STAT3 phosphorylation by sodium salicylate in cardiac fibroblasts, 1197
Lipid peroxidation induced by indomethacin with horseradish peroxidase and hydrogen peroxide: involvement of indomethacin radicals, 2069
Norepinephrine
Biochemical and pharmacological characterization of the venom of the black scorpion *Heterometrus spinifer*, 49
Northern analysis
Comparative expression of two alpha class glutathione *S*-transferases in human adult and prenatal liver tissues, 2025
NRF2
Glutamate–cysteine ligase modifier subunit: mouse *Gclm* gene structure and regulation by agents that cause oxidative stress, 1739
NSAIDs
Role of redox status on the activation of mitogen-activated protein kinase cascades by NSAIDs, 163
Is inhibition of cyclooxygenase required for the anti-tumorigenic effects of nonsteroidal, anti-inflammatory drugs (NSAIDs)? *In vitro* versus *in vivo* results and the relevance for the prevention and treatment of cancer, 343
NSCLC
Apoptosis of a human non-small cell lung cancer (NSCLC) cell line, PLA-801, induced by acutiaporberine, a novel bisalkaloid derived from *Thalictrum acutifolium* (Hand.-Mazz.) Boivin, 1389
NU/ICRF 505
Enhanced clearance of topoisomerase I inhibitors from human colon cancer cells by glucuronidation, 607
Nuclear factor-κB
Attenuation of 6-hydroxydopamine (6-OHDA)-induced nuclear factor-kappaB (NF-κB) activation and cell death by tea extracts in neuronal cultures, 21
Nuclear protein binding
7-Benzylamino-6-chloro-2-piperazino-4-pyrrolidino-pteridine, a potent inhibitor of cAMP-specific phosphodiesterase, enhancing nuclear protein binding to the CRE consensus sequence in human tumour cells, 659
Nucleoside diphosphate kinase
Identification and characterization of a novel protein histidine kinase in the islet β cell: evidence for its regulation by mastoparan, an activator of G-proteins and insulin secretion, 2091
Nucleotide excision repair
Inhibition of nucleotide excision repair and sensitisation of cells to DNA cross-linking anticancer drugs by F 11782, a novel fluorinated epipodophylloid, 251
Investigations on the effects of oltipraz on the nucleotide excision repair in the liver, 745
Nucleus tractus solitarius
Leptin, gut, and food intake, 1579
Null mice
Differences in caffeine and paraxanthine metabolism between human and murine CYP1A2, 2159

OB Protein
Leptin, gut, and food intake, 1579
Oltipraz
Investigations on the effects of oltipraz on the nucleotide excision repair in the liver, 745
Oncosis
The alkaloid sanguinarine is effective against multidrug resistance in human cervical cells *via* bimodal cell death, 1415
OPIDN
Protein levels of neurofilament subunits in the hen central nervous system following prevention and potentiation of diisopropyl phosphorofluoridate (DFP)-induced delayed neurotoxicity, 11
κ-Opioid receptor
κ-Opioid receptor agonist inhibition of HIV-1 envelope glycoprotein-mediated membrane fusion and CXCR4 expression on $CD4^+$ lymphocytes, 1037
Opioid receptors
Tetrahydroisoquinoline derivatives of enkephalins: synthesis and properties, 1893
Orbofiban
Platelet α-granule secretion and its modification by SC-57101A, a GPIIb/IIIa antagonist, 1911
Organic cations
Uptake of ^{3}H-1-methyl-4-phenylpyridinium (^{3}H-MPP^+) by human intestinal Caco-2 cells is regulated by phosphorylation/dephosphorylation mechanisms, 1565
Osteocalcin
Characterization of selective estrogen receptor modulator (SERM) activity in two triarylethylene oxybutyric acids, 1517
Osteoclastogenesis
Effects of a selective cyclooxygenase-2 inhibitor, celecoxib, on bone resorption and osteoclastogenesis *in vitro*, 523
Osthole
Inhibitory effect of the plant-extract osthole on L-type calcium current in NG108-15 neuronal cells, 199
Ovarian cancer
Reversal of cisplatin resistance in human ovarian cancer cell lines by a c-*jun* antisense oligodeoxynucleotide (ISIS 10582): evidence for the role of transcription factor overexpression in determining resistant phenotype, 1699
Oxidative Stress
Attenuation of 6-hydroxydopamine (6-OHDA)-induced nuclear factor-kappaB (NF-κB) activation and cell death by tea extracts in neuronal cultures, 21
Activation of transcription factors by drugs inducing oxidative stress in rat liver, 139
Role of redox status on the activation of mitogen-activated protein kinase cascades by NSAIDs, 163
Vanadyl as a catalyst of human lipoprotein oxidation, 375
Alzheimer's disease and oxygen radicals: new insights, 563
Alterations in cellular Ca^{2+} and free iron pool by sulfur amino acid deprivation: the role of ferritin light chain down-regulation in prooxidant production, 647

The distribution of copper, zinc- and manganese-superoxide dismutase, and glutathione peroxidase messenger ribonucleic acid in rat basal ganglia, 1159
Dose-dependent cysteine-mediated protection of insulin-producing cells from damage by hydrogen peroxide, 1297
Glutamate–cysteine ligase modifier subunit: mouse *Gclm* gene structure and regulation by agents that cause oxidative stress, 1739
Oxygen free radicals
Alzheimer's disease and oxygen radicals: new insights, 563
Oxygen radicals
Effects of 5-aminoisoquinolinone, a water-soluble, potent inhibitor of the activity of poly (ADP-ribose) polymerase, in a rodent model of lung injury, 293

p53
Biochemical changes associated with a multidrug-resistant phenotype of a human glioma cell line with temozolomide-acquired resistance, 1219
JM216-, JM118-, and cisplatin-induced cytotoxicity in relation to platinum-DNA adduct formation, glutathione levels and p53 status in human tumour cell lines with different sensitivities to cisplatin, 1989
p53
Induction of G_2/M arrest and inhibition of *c-myc* and *p53* transcription by WP631 in Jurkat T lymphocytes, 1251
Expression of *p53*-family members and associated target molecules in breast cancer cell lines in response to vincristine treatment, 1609
p63
Expression of *p53*-family members and associated target molecules in breast cancer cell lines in response to vincristine treatment, 1609
p73
Expression of *p53*-family members and associated target molecules in breast cancer cell lines in response to vincristine treatment, 1609
p38 MAPK
The involvement of L-γ-glutamyl-L-cysteinyl-glycine (glutathione/GSH) in the mechanism of redox signaling mediating $MAPK^{p38}$-dependent regulation of pro-inflammatory cytokine production, 305
Involvement of p38 mitogen-activated protein kinase in the induction of interleukin-12 p40 production in mouse macrophages by berberine, a benzodioxoloquinolizine alkaloid, 1901
P2 receptors
Apoptosis induced by extracellular ATP in the mouse neuroblastoma cell line N1E-115: studies on involvement of P2 receptors and adenosine, 1119
Paf antagonist
Sensitization of human neutrophil defense activities through activation of platelet-activating factor receptors by ginkgolide B, a bioactive component of the *Ginkgo biloba* extract EGB 761, 1241
Pancreas
Role of mitochondria in Ca^{2+} oscillations and shape of Ca^{2+} signals in pancreatic acinar cells, 283
Pancreatic β cell
In vitro and *in vivo* effects of new insulin releasing agents, 515
GTP-binding proteins in cell survival and demise: the emerging picture in the pancreatic β-cell, 1027
Troglitazone does not protect rat pancreatic β cells against free fatty acid-induced cytotoxicity, 1281
Dose-dependent cysteine-mediated protection of insulin-producing cells from damage by hydrogen peroxide, 1297
Identification and characterization of a novel protein histidine kinase in the islet β cell: evidence for its regulation by mastoparan, an activator of G-proteins and insulin secretion, 2091
Pancreatic islets
Desensitization of insulin secretion, 1921
Paraxanthine
Differences in caffeine and paraxanthine metabolism between human and murine CYP1A2, 2159
Parkinson's disease
Attenuation of 6-hydroxydopamine (6-OHDA)-induced nuclear factor-kappaB (NF-κB) activation and cell death by tea extracts in neuronal cultures, 21
Selective dopaminergic neurotoxicity of isoquinoline derivatives related to Parkinson's disease: studies using heterologous expression systems of the dopamine transporter, 909
The distribution of copper, zinc- and manganese-superoxide dismutase, and glutathione peroxidase messenger ribonucleic acid in rat basal ganglia, 1159
Tetrahydroisoquinoline derivatives of enkephalins: synthesis and properties, 1893
PARP
Wogonin and fisetin induce apoptosis in human promyeloleukemic cells, accompanied by a decrease of reactive oxygen species, and activation of caspase 3 and Ca^{2+}-dependent endonuclease, 225
Modulation of pyridyl cyanoguanidine (CHS 828) induced cytotoxicity by 3-aminobenzamide in U-937 GTB cells, 1491
PARP-inhibitor
Reduction of acute photodamage in skin by topical application of a novel PARP inhibitor, 921
Partial agonist
Sensitization of human neutrophil defense activities through activation of platelet-activating factor receptors by ginkgolide B, a bioactive component of the *Ginkgo biloba* extract EGB 761, 1241
Pathogenesis
Dose-dependent cysteine-mediated protection of insulin-producing cells from damage by hydrogen peroxide, 1297
Pathophysiology
The involvement of L-γ-glutamyl-L-cysteinyl-glycine (glutathione/GSH) in the mechanism of redox signaling mediating $MAPK^{p38}$-dependent regulation of pro-inflammatory cytokine production, 305
PC12
Stimulation of catecholamine biosynthesis *via* the protein kinase C pathway by endothelin-1 in PC12 rat pheochromocytoma cells, 977
PC12 cells
Protective effect of boldine on dopamine-induced membrane permeability transition in brain mitochondria and viability loss in PC12 cells, 495
Ritonavir inhibition of calcium-activated neutral proteases, 1481
Differentiation of PC12 cells induced by N^8-acetylspermidine and by N^8-acetylspermidine deacetylase inhibition, 2011
PD98059
Increase of the resistance of human cervical carcinoma cells to cisplatin by inhibition of the MEK to ERK signaling pathway partly *via* enhancement of anticancer drug-induced NFκB activation, 1423
Pectenotoxin-6
Characterization of F-actin depolymerization as a major toxic event induced by pectenotoxin-6 in neuroblastoma cells, 1979
Periportal
Chronic ethanol administration decreases the ligand binding properties and the cellular content of the mannose 6-phosphate/insulin-like growth factor II receptor in rat hepatocytes, 1229
Perivenular
Chronic ethanol administration decreases the ligand binding properties and the cellular content of the mannose 6-phosphate/insulin-like growth factor II receptor in rat hepatocytes, 1229
Permeability transition
Recognition forces involved in mitochondrial binding to a low-affinity trimetazidine binding site related to anti-ischemic activity, 1691
Peroxidase
5-Fluoroindole-3-acetic acid: a prodrug activated by a peroxidase with potential for use in targeted cancer therapy, 265
Peroxisome proliferator
Clofibric acid down-regulation of metallothionein IIA in HepG2 human hepatoma cells, 237
Involvement of the peroxisome proliferator-activated receptor alpha in the immunomodulation caused by peroxisome proliferators in mice, 1885

Peroxisome proliferator-activated receptor γ (PPARγ)
Toxicological consequences of altered peroxisome proliferator-activated receptor γ (PPARγ) expression in the liver: insights from models of obesity and type 2 diabetes, 1
PGE_2
Inhibition of cyclooxygenase and prostaglandin E_2 synthesis by γ-mangostin, a xanthone derivative in mangosteen, in C6 rat glioma cells, 73
Is inhibition of cyclooxygenase required for the anti-tumorigenic effects of nonsteroidal, anti-inflammatory drugs (NSAIDs)? *In vitro* versus *in vivo* results and the relevance for the prevention and treatment of cancer, 343
Dopamine D_2 receptor-induced COX-2-mediated production of prostaglandin E_2 in D_2-transfected Chinese hamster ovary cells without simultaneous administration of a Ca^{2+}-mobilizing agent, 2151
PGE synthase
Inhibition of inducible prostaglandin E_2 synthase by 15-deoxy-$\Delta^{12,14}$-prostaglandin J_2 and polyunsaturated fatty acids, 1183
$PGF_{2\alpha}$
Differential regulation of Ca^{2+}-dependent Cl^- currents by FP prostanoid receptor isoforms in *Xenopus* oocytes, 1797
P-glycoprotein
Modulation of *mdr1a* and *CYP3A* gene expression in the intestine and liver as possible cause of changes in the cyclosporin. A disposition kinetics by dexamethasone, 777
Involvement of phosphatidylinositol-3-kinase in membrane ruffling induced by P-glycoprotein substrates in multidrug-resistant carcinoma cells, 959
Characterization of anthracenediones and their photoaffinity analogs, 1143
Preferential efflux by P-glycoprotein, but not MRP1, of compounds containing a free electron donor amine, 1471
Elevated uptake of low density lipoprotein by drug resistant human leukemic cell lines, 2169
P-glycoprotein substrate
Involvement of phosphatidylinositol-3-kinase in membrane ruffling induced by P-glycoprotein substrates in multidrug-resistant carcinoma cells, 959
Pharmacodynamics
In vitro pharmacokinetics and pharmacodynamics of 1,3-bis(2-chloroethyl)-1-nitrosourea (BCNU), 1209
Pharmacogenetics
Reduced (±)-3,4-methylenedioxymethamphetamine ("Ecstasy") metabolism with cytochrome P450 2D6 inhibitors and pharmacogenetic variants *in vitro*, 2111
Pharmacokinetics
Modulation of *mdr1a* and *CYP3A* gene expression in the intestine and liver as possible cause of changes in the cyclosporin. A disposition kinetics by dexamethasone, 777
In vitro pharmacokinetics and pharmacodynamics of 1,3-bis(2-chloroethyl)-1-nitrosourea (BCNU), 1209
Reduced (±)-3,4-methylenedioxymethamphetamine ("Ecstasy") metabolism with cytochrome P450 2D6 inhibitors and pharmacogenetic variants *in vitro*, 2111
Pharmacology
Pharmacological approaches to prion research, 1383
Phenelzine
Effects of the antidepressant/antipanic drug phenelzine and its putative metabolite phenylethylidenehydrazine on extracellular γ-aminobutyric acid levels in the striatum, 57
Phenobarbital
Differential regulation of multidrug resistance-associated protein 2 (MRP2) and cytochromes P450 2B1/2 and 3A1/2 in phenobarbital-treated hepatocytes, 333
Phenothiazine
Novel phenothiazine antimalarials: synthesis, antimalarial activity, and inhibition of the formation of β-haematin, 833
Phentermine
Phentermine inhibition of recombinant human liver monoamine oxidases A and B, 865
Phenylethylidenehydrazine
Effects of the antidepressant/antipanic drug phenelzine and its putative metabolite phenylethylidenehydrazine on extracellular γ-aminobutyric acid levels in the striatum, 57
Phenytoin
Identification of catalase in human livers as a factor that enhances phenytoin dihydroxy metabolite formation by human liver microsomes, 2081
Phorbol ester
Activation of protein kinase C for protection of cells against apoptosis induced by the immunosuppressor prodigiosin, 463
(−)-Epicatechin effects in rat liver epithelial cells: stimulation of gap junctional communication and counteraction of its loss due to the tumor promoter 12-*O*-tetradecanoylphorbol-13-acetate, 2145
Phosphatidylcholine
Enhancement of phosphatidylcholine biosynthesis by angiotensin-(1–7) in the rat renal cortex, 507
Phosphatidylinositol-3-kinase
Involvement of phosphatidylinositol-3-kinase in membrane ruffling induced by P-glycoprotein substrates in multidrug-resistant carcinoma cells, 959
Phosphodiesterase
7-Benzylamino-6-chloro-2-piperazino-4-pyrrolidino-pteridine, a potent inhibitor of cAMP-specific phosphodiesterase, enhancing nuclear protein binding to the CRE consensus sequence in human tumour cells, 659
Intracellular localization of 7-benzylamino-6-chloro-2-piperazino-4-pyrrolidino-pteridine in membrane structures impeding the inhibition of cytosolic cyclic AMP-specific phosphodiesterase, 669
Characterisation of cyclic nucleotide phosphodiesterase isoforms in the media layer of the main pulmonary artery, 1763
Phosphodiesterase 4
Comparison of inhibition of ovalbumin-induced bronchoconstriction in guinea pigs and *in vitro* inhibition of tumor necrosis factor-α formation with phosphodiesterase 4 (PDE4) selective inhibitors, 1527
Phosphodiesterase inhibitors
Pharmacological characterization of the ATP-dependent low K_m guanosine 3′,5′-cyclic monophosphate (cGMP) transporter in human erythrocytes, 945
Phosphodiesterease inhibitors
Regulation of cyclic AMP in rat pulmonary microvascular endothelial cells by rolipram-sensitive cyclic AMP phosphodiesterase (PDE4), 797
Phosphoinositide hydrolysis
Dual coupling of MT_1 and MT_2 melatonin receptors to cyclic AMP and phosphoinositide signal transduction cascades and their regulation following melatonin exposure, 587
Phospholamban
Inhibition of type 1 protein phosphatase activity by activation of β-adrenoceptors in ventricular myocardium, 1069
Phospholipase A_2
Human neutrophil migration *in vitro* induced by secretory phospholipases A_2: a role for cell surface glycosaminoglycans, 65
Identification of the phospholipase A_2 isoforms that contribute to arachidonic acid release in hypoxic endothelial cells: limits of phospholipase A_2 inhibitors, 321
Phospholipase C
p53-Independent induction of Fas and apoptosis in leukemic cells by an adenosine derivative, Cl-IB-MECA, 871
Regulation of phospholipase C activation by the number of H_2 receptors during Ca^{2+}-induced differentiation of mouse keratinocytes, 1785
Phospholipase D
Inhibition of superoxide anion generation by YC-1 in rat neutrophils through cyclic GMP-dependent and -independent mechanisms, 577
Sensitization of human neutrophil defense activities through activation of platelet-activating factor receptors by ginkgolide B, a bioactive component of the *Ginkgo biloba* extract EGB 761, 1241

Phosphorothioate
Sequence and chemistry requirements for a novel aptameric oligonucleotide inhibitor of EGF receptor tyrosine kinase activity, 2187
Phosphorylation
Lack of involvement of extracellular signal-regulated kinase (ERK) in the agonist-induced endothelial nitric oxide synthesis, 1137
Phosphorylation reactivation
DNA sequence of butyrylcholinesterase from the rat: expression of the protein and characterization of the properties of rat butyrylcholinesterase, 2101
Photoaffinity labeling
Characterization of anthracenediones and their photoaffinity analogs, 1143
Photochemotherapy
Cell-impermeant pyridinium derivatives of psoralens as inhibitors of keratinocyte growth, 31
Mechanisms of growth inhibition in keratinocytes by mercurio-substituted 4′,5′-dihydropsoralens, 2001
Photodamage
Reduction of acute photodamage in skin by topical application of a novel PARP inhibitor, 921
Photoprotection
Reduction of acute photodamage in skin by topical application of a novel PARP inhibitor, 921
Picrotoxin
Evidence for the involvement of L-citrulline but not nitric oxide in the proconvulsant action of the precursor L-arginine on picrotoxin-induced convulsions in rats, 2019
PKA
7-Benzylamino-6-chloro-2-piperazino-4-pyrrolidino-pteridine, a potent inhibitor of cAMP-specific phosphodiesterase, enhancing nuclear protein binding to the CRE consensus sequence in human tumour cells, 659
PKC
Effect of malondialdehyde–acetaldehyde–protein adducts on the protein kinase C-dependent secretion of urokinase-type plasminogen activator in hepatic stellate cells, 553
Stimulation of catecholamine biosynthesis *via* the protein kinase C pathway by endothelin-1 in PC12 rat pheochromocytoma cells, 977
PLA_2 inhibitors
Identification of the phospholipase A_2 isoforms that contribute to arachidonic acid release in hypoxic endothelial cells: limits of phospholipase A_2 inhibitors, 321
Placenta
UDP-glucuronosyltransferase activity, expression and cellular localization in human placenta at term, 409
Placental metabolism
UDP-glucuronosyltransferase activity, expression and cellular localization in human placenta at term, 409
Plasmin inhibitor
A selective plasmin inhibitor, *trans*-aminomethylcyclohexanecarbonyl-L-(*O*-picolyl)tyrosine-octylamide (YO-2), induces thymocyte apoptosis, 1315
Plasmodium falciparum
Differential effects of 4-aminoquinoline-containing antimalarial drugs on hemoglobin digestion in *Plasmodium falciparum*-infected erythrocytes, 393
Platelet
Effect of isatin on nitric oxide-stimulated soluble guanylate cyclase from human platelets, 763
Platelet α-granule secretion and its modification by SC-57101A, a GPIIb/IIIa antagonist, 1911
Platelet aggregation
Purification and characterization of a phospholipase A_2 isoenzyme isolated from *Lachesis muta* snake venom, 1589
Platelet-activating factor
Human neutrophil migration *in vitro* induced by secretory phospholipases A_2: a role for cell surface glycosaminoglycans, 65
Pleurisy
Effects of 5-aminoisoquinolinone, a water-soluble, potent inhibitor of the activity of poly (ADP-ribose) polymerase, in a rodent model of lung injury, 293
PLHC-1 cells
Serum withdrawal leads to reduced aryl hydrocarbon receptor expression and loss of cytochrome P4501A inducibility in PLHC-1 cells, 1405
PMSF
Protein levels of neurofilament subunits in the hen central nervous system following prevention and potentiation of diisopropyl phosphorofluoridate (DFP)-induced delayed neurotoxicity, 11
Poly (ADP-ribose) synthetase
Effects of 5-aminoisoquinolinone, a water-soluble, potent inhibitor of the activity of poly (ADP-ribose) polymerase, in a rodent model of lung injury, 293
Poly(ADP-ribose) polymerase
p53-Independent induction of Fas and apoptosis in leukemic cells by an adenosine derivative, Cl-IB-MECA, 871
BGP-15 — a novel poly(ADP-ribose) polymerase inhibitor — protects against nephrotoxicity of cisplatin without compromising its antitumor activity, 1099
Poly(ADP-ribose) polymerase protease induction
Anti-cancer action of 4-iodo-3-nitrobenzamide in combination with buthionine sulfoximine: inactivation of poly(ADP-ribose) polymerase and tumor glycolysis and the appearance of a poly(ADP-ribose) polymerase protease, 455
Poly-ADP-ribosylation
Reduction of acute photodamage in skin by topical application of a novel PARP inhibitor, 921
Polyamine
Differentiation of PC12 cells induced by N^8-acetylspermidine and by N^8-acetylspermidine deacetylase inhibition, 2011
Polyanions
The influence of charge clustering on the anti-HIV-1 activity and *in vivo* distribution of negatively charged albumins, 1663
Polyglutamylation
Multiple mechanisms of resistance to methotrexate and novel antifolates in human CCRF-CEM leukemia cells and their implications for folate homeostasis, 105
Polyhalogenated biphenyls
Bilirubin and uroporphyrinogen oxidation by induced cytochrome P4501A and cytochrome P4502B. Role of polyhalogenated biphenyls of different configuration, 615
Polymorphonuclear neutrophils
Protective effects of Celecoxib on lung injury and red blood cells modification induced by carrageenan in the rat, 785
Polyphenols
Structure–activity relationships for inhibition of human 5α-reductases by polyphenols, 1165
Polyploidy
Induction of G_2/M arrest and inhibition of *c-myc* and *p53* transcription by WP631 in Jurkat T lymphocytes, 1251
Potassium currents
A critical role for a tyrosine residue in the cannabinoid receptors for ligand recognition, 2121
PPAR
Clofibric acid down-regulation of metallothionein IIA in HepG2 human hepatoma cells, 237
PPARγ
Effects of 1,1,1-trichloro-2,2-bis(*p*-chlorophenyl)-ethane (*p*,*p*′-DDT) on 3T3-L1 and 3T3-F442A adipocyte differentiation, 997
PPARα
Involvement of the peroxisome proliferator-activated receptor alpha in the immunomodulation caused by peroxisome proliferators in mice, 1885
Pravastatin
Effects of streptozotocin-induced diabetes on acetoacetyl-CoA synthetase activity in rats, 1851

Prenatal liver
Comparative expression of two alpha class glutathione *S*-transferases in human adult and prenatal liver tissues, 2025
Preservatives
In vitro induction of apoptosis vs. necrosis by widely used preservatives: 2-phenoxyethanol, a mixture of isothiazolinones, imidazolidinyl urea and 1,2-pentanediol, 437
Primary rat hepatocyte
Induction of glutathione-*S*-transferase mRNA levels by chemopreventive selenocysteine *Se*-conjugates, 1843
Prion
Pharmacological approaches to prion research, 1383
Pro-apoptotic proteins
Biochemical changes associated with a multidrug-resistant phenotype of a human glioma cell line with temozolomide-acquired resistance, 1219
Probe
Substrate specificity for rat cytochrome P450 (CYP) isoforms: screening with cDNA-expressed systems of the rat, 889
Proconvulsant
Evidence for the involvement of L-citrulline but not nitric oxide in the proconvulsant action of the precursor L-arginine on picrotoxin-induced convulsions in rats, 2019
Prodigiosin
Activation of protein kinase C for protection of cells against apoptosis induced by the immunosuppressor prodigiosin, 463
Prodrug
5-Fluoroindole-3-acetic acid: a prodrug activated by a peroxidase with potential for use in targeted cancer therapy, 265
A doxorubicin–CNGRC-peptide conjugate with prodrug properties, 897
Promoter analysis
Glutamate–cysteine ligase modifier subunit: mouse *Gclm* gene structure and regulation by agents that cause oxidative stress, 1739
Prostaglandin
Identification of the phospholipase A_2 isoforms that contribute to arachidonic acid release in hypoxic endothelial cells: limits of phospholipase A_2 inhibitors, 321
Effects of a selective cyclooxygenase-2 inhibitor, celecoxib, on bone resorption and osteoclastogenesis *in vitro*, 523
Selective cyclooxygenase-2 (COX-2) inhibitors and potential risk of cardiovascular events, 817
Inhibition of inducible prostaglandin E_2 synthase by 15-deoxy-$\Delta^{12,14}$-prostaglandin J_2 and polyunsaturated fatty acids, 1183
Differential regulation of Ca^{2+}-dependent Cl^- currents by FP prostanoid receptor isoforms in *Xenopus* oocytes, 1797
Prostanoids
Is inhibition of cyclooxygenase required for the anti-tumorigenic effects of nonsteroidal, anti-inflammatory drugs (NSAIDs)? *In vitro* versus *in vivo* results and the relevance for the prevention and treatment of cancer, 343
Prostate cancer
Structure–activity relationships for inhibition of human 5α-reductases by polyphenols, 1165
Prostate cancer cell lines
Jolkinolide B induces neuroendocrine differentiation of human prostate LNCaP cancer cell line, 951
Protection
Protective effect of boldine on dopamine-induced membrane permeability transition in brain mitochondria and viability loss in PC12 cells, 495
Protein interaction
Association of dopamine D_3 receptors with actin-binding protein 280 (ABP-280), 859
Protein kinase A
Uptake of ^{3}H-1-methyl-4-phenylpyridinium (^{3}H-MPP$^+$) by human intestinal Caco-2 cells is regulated by phosphorylation/dephosphorylation mechanisms, 1565
Protein kinase C
Activation of protein kinase C for protection of cells against apoptosis induced by the immunosuppressor prodigiosin, 463
Uptake of ^{3}H-1-methyl-4-phenylpyridinium (^{3}H-MPP$^+$) by human intestinal Caco-2 cells is regulated by phosphorylation/dephosphorylation mechanisms, 1565
Protein kinase Cα-dependent increase in Ca^{2+}-independent phospholipase A_2 in membranes and arachidonic acid liberation in zymosan-stimulated macrophage-like P388D_1 cells, 1969
Protein kinase C isoforms
Involvement of the muscarinic acetylcholine receptor in inhibition of cell migration, 597
Protein phosphatase
Inhibition of type 1 protein phosphatase activity by activation of β-adrenoceptors in ventricular myocardium, 1069
Protein phosphatase 2A
Carbohydrate responsive element-binding protein (ChREBP): a key regulator of glucose metabolism and fat storage, 2075
Protein phosphorylation
Selective inhibition of STAT3 phosphorylation by sodium salicylate in cardiac fibroblasts, 1197
Prothrombotic effects
Selective cyclooxygenase-2 (COX-2) inhibitors and potential risk of cardiovascular events, 817
Pseudomonas aeruginosa
Antimicrobial effect of resveratrol on dermatophytes and bacterial pathogens of the skin, 99
Psoralen receptor
Cell-impermeant pyridinium derivatives of psoralens as inhibitors of keratinocyte growth, 31
Psoralens
Cell-impermeant pyridinium derivatives of psoralens as inhibitors of keratinocyte growth, 31
Mechanisms of growth inhibition in keratinocytes by mercurio-substituted 4′,5′-dihydropsoralens, 2001
Psychostimulants
A novel mechanism of action and potential use for lobeline as a treatment for psychostimulant abuse, 89
Pt-DNA adducts
JM216-, JM118-, and cisplatin-induced cytotoxicity in relation to platinum-DNA adduct formation, glutathione levels and p53 status in human tumour cell lines with different sensitivities to cisplatin, 1989
Pulse radiolysis
Modifying rates of reductive elimination of leaving groups from indolequinone prodrugs: a key factor in controlling hypoxia-selective drug release, 1629
Purification of phospholipase A_2
Purification and characterization of a phospholipase A_2 isoenzyme isolated from *Lachesis muta* snake venom, 1589
Purine salvage
Pathways for α-D-ribose utilization for nucleobase salvage and 5-fluorouracil activation in rat brain, 117
Purines
Pharmacological characterization of the ATP-dependent low K_m guanosine 3′,5′-cyclic monophosphate (cGMP) transporter in human erythrocytes, 945
PUVA
Cell-impermeant pyridinium derivatives of psoralens as inhibitors of keratinocyte growth, 31
Mechanisms of growth inhibition in keratinocytes by mercurio-substituted 4′,5′-dihydropsoralens, 2001
Pyrimidine salvage
Pathways for α-D-ribose utilization for nucleobase salvage and 5-fluorouracil activation in rat brain, 117
qPCR
Comparison of inhibition of ovalbumin-induced bronchoconstriction in guinea pigs and *in vitro* inhibition of tumor necrosis factor-α formation with phosphodiesterase 4 (PDE4) selective inhibitors, 1527

QSAR
Structure–activity studies of bufokinin, substance P and their C-terminal fragments at bufokinin receptors in the small intestine of the cane toad, *Bufo marinus*, 217
Quinolones
Differences in caffeine and paraxanthine metabolism between human and murine CYP1A2, 2159

Radioligand binding
Molecular cloning and pharmacological characterization of bovine calcitonin receptor-like receptor from bovine aortic endothelial cells, 1949
Structure-activity relationship of neurokinin A(4–10) at the human tachykinin NK_2 receptor: the effect of amino acid substitutions on receptor affinity and function, 2181
Raloxifene
Characterization of selective estrogen receptor modulator (SERM) activity in two triarylethylene oxybutyric acids, 1517
RAR-β
Influence of isomerisation on the growth inhibitory effects and cellular activity of 13-*cis* and all-*trans* retinoic acid in neuroblastoma cells, 207
Rat
Substrate specificity for rat cytochrome P450 (CYP) isoforms: screening with cDNA-expressed systems of the rat, 889
Modulation of the β-adrenergic receptor system of vascular smooth muscle cells *in vitro* and *in vivo* by chronically elevated endothelin-1 levels, 1361
Physiological factors affecting the expression of FMO1 and FMO3 in the rat liver and kidney, 1453
Verapamil decreases glucuronidase activity in the gut, 1575
Rat brain
Pathways for α-D-ribose utilization for nucleobase salvage and 5-fluorouracil activation in rat brain, 117
Rat heart mitochondria
Effect of the new matrix metalloproteinase inhibitor RO-28-2653 on mitochondrial function, 725
Rat ileum
Effects of dexamethasone and protein kinase C inhibitors on the induction of bradykinin B_1 mRNA and the bradykinin B_1 receptor-mediated contractile response in isolated rat ileum, 2043
Rat lipoproteins
Inhibition of rat lipoprotein oxidation after tetradecylthioacetic acid feeding, 1127
Rat UGT1A6
Coordinate regulation of UDP-glucuronosyltransferase UGT1A6 induction by 3-methylcholanthrene and multidrug resistance protein MRP2 expression by dexamethasone in primary rat hepatocytes, 2137
RAW 264.7
Inhibition of lipopolysaccharide-stimulated nitric oxide production in RAW 264.7 macrophages by a synthetic carbazole, LCY-2-CHO, 1961
Reactive oxygen intermediates
Induction of apoptosis by diallyl disulfide through activation of caspase-3 in human leukemia HL-60 cells, 41
Reactive oxygen species
Antioxidant properties of Thonningianin A, isolated from the African medicinal herb, *Thonningia sanguinea*, 1725
Receptor
Analysis of C-terminally substituted tachykinin-like peptide agonists by means of aequorin-based luminescent assays for human and insect neurokinin receptors, 1675
Receptor activity modifying protein
Molecular cloning and pharmacological characterization of bovine calcitonin receptor-like receptor from bovine aortic endothelial cells, 1949
Receptor expression
Serum withdrawal leads to reduced aryl hydrocarbon receptor expression and loss of cytochrome P4501A inducibility in PLHC-1 cells, 1405
Receptor modeling
Serum withdrawal leads to reduced aryl hydrocarbon receptor expression and loss of cytochrome P4501A inducibility in PLHC-1 cells, 1405
Receptor subtypes
Association of dopamine D_3 receptors with actin-binding protein 280 (ABP-280), 859
Receptor tyrosine kinase inhibitor
Sequence and chemistry requirements for a novel aptameric oligonucleotide inhibitor of EGF receptor tyrosine kinase activity, 2187
Receptors
Modulation of dendritic release of dopamine by metabotropic glutamate receptors in rat substantia nigra, 1343
Modulation of the β-adrenergic receptor system of vascular smooth muscle cells *in vitro* and *in vivo* by chronically elevated endothelin-1 levels, 1361
Recognition forces
Recognition forces involved in mitochondrial binding to a low-affinity trimetazidine binding site related to anti-ischemic activity, 1691
Redox
The involvement of L-γ-glutamyl-L-cysteinyl-glycine (glutathione/GSH) in the mechanism of redox signaling mediating $MAPK^{p38}$-dependent regulation of pro-inflammatory cytokine production, 305
Reduced folate carrier
Multiple mechanisms of resistance to methotrexate and novel antifolates in human CCRF-CEM leukemia cells and their implications for folate homeostasis, 105
Role of the C-terminus and the long cytoplasmic loop in reduced folate carrier expression and function, 1717
5α-Reductase
Structure–activity relationships for inhibition of human 5α-reductases by polyphenols, 1165
Reduction
Modifying rates of reductive elimination of leaving groups from indolequinone prodrugs: a key factor in controlling hypoxia-selective drug release, 1629
Renal cell culture model
Cytoprotective role of taurine in a renal epithelial cell culture model, 1051
Renal cortex
Enhancement of phosphatidylcholine biosynthesis by angiotensin-(1–7) in the rat renal cortex, 507
Renal tubules
Inhibition of gluconeogenesis by vanadium and metformin in kidney-cortex tubules isolated from control and diabetic rabbits, 1371
Reperfusion
Mitochondrial gene expression and ventricular fibrillation in ischemic/reperfused nondiabetic and diabetic myocardium, 543
Resveratrol
Antimicrobial effect of resveratrol on dermatophytes and bacterial pathogens of the skin, 99
Reticuline
Selective dopaminergic neurotoxicity of isoquinoline derivatives related to Parkinson's disease: studies using heterologous expression systems of the dopamine transporter, 909
Retinoic acid
Influence of isomerisation on the growth inhibitory effects and cellular activity of 13-*cis* and all-*trans* retinoic acid in neuroblastoma cells, 207
Retinoic acid 4-oxidation
Human cytochrome P450s involved in the metabolism of 9-*cis*- and 13-*cis*-retinoic acids, 933
Retinoids
Human cytochrome P450s involved in the metabolism of 9-*cis*- and 13-*cis*-retinoic acids, 933
Reversal potential
Hydrogen peroxide-induced current in *Xenopus* oocytes: current characteristics similar to those induced by the removal of extracellular calcium, 569

Ritonavir
Ritonavir inhibition of calcium-activated neutral proteases, 1481
RNase
Toward RNase inhibitors: thermodynamics of 2′-CMP/RNase-A binding in multi-ion buffer, 1937
RO-28-2653
Effect of the new matrix metalloproteinase inhibitor RO-28-2653 on mitochondrial function, 725
Rofecoxib
Selective cyclooxygenase-2 (COX-2) inhibitors and potential risk of cardiovascular events, 817
Rolipram
Regulation of cyclic AMP in rat pulmonary microvascular endothelial cells by rolipram-sensitive cyclic AMP phosphodiesterase (PDE4), 797
Ros
Role of redox status on the activation of mitogen-activated protein kinase cascades by NSAIDs, 163
Rotenone
Mitochondrial toxin inhibition of [^{3}H]dopamine uptake into rat striatal synaptosomes, 1499

S23906-1
Induction of apoptosis in HL-60 leukemia and B16 melanoma cells by the acronycine derivative S23906-1, 1443
Salicylate
Fluorescein uptake by a monocarboxylic acid transporter in human intestinal Caco-2 cells, 81
Sanguiin H-6
Effects of sanguiin H-6, a component of Sanguisorbae Radix, on lipopolysaccharide-stimulated nitric oxide production, 853
Sanguisorbae Radix
Effects of sanguiin H-6, a component of Sanguisorbae Radix, on lipopolysaccharide-stimulated nitric oxide production, 853
SC-57101A
Platelet α-granule secretion and its modification by SC-57101A, a GPIIb/IIIa antagonist, 1911
Scorpion venom
Biochemical and pharmacological characterization of the venom of the black scorpion *Heterometrus spinifer*, 49
Second messengers
The direct stimulation of Gi proteins by neuropeptide Y (NPY) in the rat left ventricle, 2063
Secretion
Platelet α-granule secretion and its modification by SC-57101A, a GPIIb/IIIa antagonist, 1911
Selective tumor necrosis
Anti-cancer action of 4-iodo-3-nitrobenzamide in combination with buthionine sulfoximine: inactivation of poly(ADP-ribose) polymerase and tumor glycolysis and the appearance of a poly(ADP-ribose) polymerase protease, 455
Selenium
Induction of glutathione-*S*-transferase mRNA levels by chemopreventive selenocysteine *Se*-conjugates, 1843
Drug-resistant human lung cancer cells are more sensitive to selenium cytotoxicity. Effects on thioredoxin reductase and glutathione reductase, 1875
Semiquinone radical
Modifying rates of reductive elimination of leaving groups from indolequinone prodrugs: a key factor in controlling hypoxia-selective drug release, 1629
Serine protease
Matrix and serine protease expression during leukemic cell differentiation induced by aclacinomycin and all-*trans*-retinoic acid, 179
Degradation of glyceraldehyde-3-phosphate dehydrogenase induced by acetylleucine chloromethyl ketone in U937 cells, 1857
SERM
Characterization of selective estrogen receptor modulator (SERM) activity in two triarylethylene oxybutyric acids, 1517
Sex hormones
Sexual dimorphic expression of mouse hepatic CYP2B: alterations during development or after hypophysectomy, 2037
Sexual dimorphism
Sexual dimorphic expression of mouse hepatic CYP2B: alterations during development or after hypophysectomy, 2037
Side effect
BGP-15 — a novel poly(ADP-ribose) polymerase inhibitor — protects against nephrotoxicity of cisplatin without compromising its antitumor activity, 1099
Signal transducer and activator of transcription
Selective inhibition of STAT3 phosphorylation by sodium salicylate in cardiac fibroblasts, 1197
Signal transduction
Regulation of cyclic AMP in rat pulmonary microvascular endothelial cells by rolipram-sensitive cyclic AMP phosphodiesterase (PDE4), 797
Involvement of phosphatidylinositol-3-kinase in membrane ruffling induced by P-glycoprotein substrates in multidrug-resistant carcinoma cells, 959
Modulation of the β-adrenergic receptor system of vascular smooth muscle cells *in vitro* and *in vivo* by chronically elevated endothelin-1 levels, 1361
Regulation of phospholipase C activation by the number of H_2 receptors during Ca^{2+}-induced differentiation of mouse keratinocytes, 1785
The direct stimulation of Gi proteins by neuropeptide Y (NPY) in the rat left ventricle, 2063
Signaling
Association of dopamine D_3 receptors with actin-binding protein 280 (ABP-280), 859
Single channel current
Effects of Ca^{2+} channel blockers on amiloride-sensitive Na^+ permeable channels and Na^+ transport in fetal rat alveolar type II epithelium, 1547
Smooth muscle
Modulation of the β-adrenergic receptor system of vascular smooth muscle cells *in vitro* and *in vivo* by chronically elevated endothelin-1 levels, 1361
Characterisation of cyclic nucleotide phosphodiesterase isoforms in the media layer of the main pulmonary artery, 1763
Smooth muscle relaxation
Lack of involvement of extracellular signal-regulated kinase (ERK) in the agonist-induced endothelial nitric oxide synthesis, 1137
SN-38
Enhanced clearance of topoisomerase I inhibitors from human colon cancer cells by glucuronidation, 607
Solubility
Structural refinement of inhibitors of urea-based soluble epoxide hydrolases, 1599
Sorcin overexpression
Overexpression of sorcin, a calcium-binding protein, induces a low level of paclitaxel resistance in human ovarian and breast cancer cells, 1149
Sphingosine-1-phosphate
Neuronal cell death induced by antidepressants: lack of correlation with Egr-1, NF-κB and extracellular signal-regulated protein kinase activation, 1507
Spin traps
ESR analysis of spin adducts of alkoxyl and lipid-derived radicals with the spin trap Trazon, 1465
Spinal cord
Protein levels of neurofilament subunits in the hen central nervous system following prevention and potentiation of diisopropyl phosphorofluoridate (DFP)-induced delayed neurotoxicity, 11
$sPLA_2$ neurotoxin
Inhibition of crotoxin phospholipase A_2 activity by manoalide associated with inactivation of crotoxin toxicity and dissociation of the heterodimeric neurotoxic complex, 755
Spleen
Involvement of the peroxisome proliferator-activated receptor alpha in the immunomodulation caused by peroxisome proliferators in mice, 1885

Splenocyte
Involvement of the peroxisome proliferator-activated receptor alpha in the immunomodulation caused by peroxisome proliferators in mice, 1885
Stable isotope
Increased rate of glutathione synthesis from cystine in drug-resistant MCF-7 cells, 843
Stacking interactions
The modulation of the DNA-damaging effect of polycyclic aromatic agents by xanthines. Part I. Reduction of cytostatic effects of quinacrine mustard by caffeine, 625
The modulation by xanthines of the DNA-damaging effect of polycyclic aromatic agents. Part II. The stacking complexes of caffeine with doxorubicin and mitoxantrone, 635
Staphylococcus aureus
Antimicrobial effect of resveratrol on dermatophytes and bacterial pathogens of the skin, 99
Steady-state kinetics
DNA sequence of butyrylcholinesterase from the rat: expression of the protein and characterization of the properties of rat butyrylcholinesterase, 2101
Stem cell toxicity
Stem cell toxicity of oxazaphosphorine metabolites in comparison to their antileukemic activity, 1337
Steroid
Pharmacological characterization of the ATP-dependent low K_m guanosine 3′,5′-cyclic monophosphate (cGMP) transporter in human erythrocytes, 945
Basal levels and patterns of anticancer drug-induced activation of nuclear factor-κB (NF-κB), and its attenuation by tamoxifen, dexamethasone, and curcumin in carcinoma cells, 1709
Stonustoxin
Characterization of the mechanism underlying stonustoxin-mediated relaxant response in the rat aorta *in vitro*, 1113
Streptozotocin
Sensitivity of HaCat keratinocytes to diabetogenic toxins, 171
Effects of streptozotocin-induced diabetes on acetoacetyl-CoA synthetase activity in rats, 1851
Stress
Effect of isatin on nitric oxide-stimulated soluble guanylate cyclase from human platelets, 763
Striatum
Effects of the antidepressant/antipanic drug phenelzine and its putative metabolite phenylethylidenehydrazine on extracellular γ-aminobutyric acid levels in the striatum, 57
Mitochondrial toxin inhibition of [^{3}H]dopamine uptake into rat striatal synaptosomes, 1499
Structure
The influence of charge clustering on the anti-HIV-1 activity and *in vivo* distribution of negatively charged albumins, 1663
Structure–activity
Structure–activity studies of bufokinin, substance P and their C-terminal fragments at bufokinin receptors in the small intestine of the cane toad, *Bufo marinus*, 217
Structure-activity relationship of neurokinin A(4–10) at the human tachykinin NK_2 receptor: the effect of amino acid substitutions on receptor affinity and function, 2181
Structure–activity relationship
Structural refinement of inhibitors of urea-based soluble epoxide hydrolases, 1599
Intercalation of imidazoacridinones to DNA and its relevance to cytotoxic and antitumor activity, 1653
Subcellular fractionation
Obligatory role of membrane events in the regulatory effect of metformin on the respiratory chain function, 1259
Subcellular fractions
Characterisation of cyclic nucleotide phosphodiesterase isoforms in the media layer of the main pulmonary artery, 1763
Substance P
Structure–activity studies of bufokinin, substance P and their C-terminal fragments at bufokinin receptors in the small intestine of the cane toad, *Bufo marinus*, 217
Substance P receptor
Characterization of the mechanism underlying stonustoxin-mediated relaxant response in the rat aorta *in vitro*, 1113
Substrate specificity
Substrate specificity for rat cytochrome P450 (CYP) isoforms: screening with cDNA-expressed systems of the rat, 889
Suc–HSA
The influence of charge clustering on the anti-HIV-1 activity and *in vivo* distribution of negatively charged albumins, 1663
Sulfonylureas
Desensitization of insulin secretion, 1921
Sulfotransferase
Reverse geometrical selectivity in glucuronidation and sulfation of *cis*- and *trans*-4-hydroxytamoxifens by human liver UDP-glucuronosyltransferases and sulfotransferases, 1817
Sulfur amino acids
Alterations in cellular Ca^{2+} and free iron pool by sulfur amino acid deprivation: the role of ferritin light chain down-regulation in prooxidant production, 647
Superoxide anion
Inhibition of superoxide anion generation by YC-1 in rat neutrophils through cyclic GMP-dependent and -independent mechanisms, 577
Surface plasmon resonance
Inhibition of crotoxin phospholipase A_2 activity by manoalide associated with inactivation of crotoxin toxicity and dissociation of the heterodimeric neurotoxic complex, 755
Synthesis and metabolism of steroid esters
Effect of clofibrate administration on the esterification and deesterification of steroid hormones by liver and extrahepatic tissues in rats, 985

T helper
Involvement of p38 mitogen-activated protein kinase in the induction of interleukin-12 p40 production in mouse macrophages by berberine, a benzodioxoloquinolizine alkaloid, 1901
Tachykinin receptors
Structure–activity studies of bufokinin, substance P and their C-terminal fragments at bufokinin receptors in the small intestine of the cane toad, *Bufo marinus*, 217
3T3-adipocytes
Exendin-4 increases insulin sensitivity via a PI-3-kinase-dependent mechanism: contrasting effects of GLP-1, 993
Tamoxifen
The effects of natural ligands of hormone receptors and their antagonists on telomerase activity in the androgen sensitive prostatic cancer cell line LNCaP, 1177
Characterization of selective estrogen receptor modulator (SERM) activity in two triarylethylene oxybutyric acids, 1517
Basal levels and patterns of anticancer drug-induced activation of nuclear factor-κB (NF-κB), and its attenuation by tamoxifen, dexamethasone, and curcumin in carcinoma cells, 1709
TARDIS
Formation and longevity of idarubicin-induced DNA topoisomerase II cleavable complexes in K562 human leukaemia cells, 1807
Taurine
Methionine synthase activity and sulphur amino acid levels in the rat liver tumour cells HTC and Phi-1, 381
Cytoprotective role of taurine in a renal epithelial cell culture model, 1051
Taxol
Fas/CD95-mediated apoptosis in human glioblastoma cells: a target for sensitisation to topoisomerase I inhibitors, 881
TCDD
Serum withdrawal leads to reduced aryl hydrocarbon receptor expression and loss of cytochrome P4501A inducibility in PLHC-1 cells, 1405

TCM
Apoptosis of a human non-small cell lung cancer (NSCLC) cell line, PLA-801, induced by acutiaporberine, a novel bisalkaloid derived from *Thalictrum acutifolium* (Hand.-Mazz.) Boivin, 1389
Telomerase
The effects of natural ligands of hormone receptors and their antagonists on telomerase activity in the androgen sensitive prostatic cancer cell line LNCaP, 1177
tert-Butylhydroquinone
Glutamate–cysteine ligase modifier subunit: mouse *Gclm* gene structure and regulation by agents that cause oxidative stress, 1739
Tetradecylthioacetic acid
Inhibition of rat lipoprotein oxidation after tetradecylthioacetic acid feeding, 1127
Tetrahydroisoquinolines
Tetrahydroisoquinoline derivatives of enkephalins: synthesis and properties, 1893
Tetrapyrrole
Pharmacological approaches to prion research, 1383
3T3-F442A
Effects of 1,1,1-trichloro-2,2-bis(*p*-chlorophenyl)-ethane (*p,p'*-DDT) on 3T3-L1 and 3T3-F442A adipocyte differentiation, 997
TGFβ1
Interaction of specifically chemically modified dextrans with transforming growth factor β1: potentiation of its biological activity, 129
Thalictrum acutifolium
Apoptosis of a human non-small cell lung cancer (NSCLC) cell line, PLA-801, induced by acutiaporberine, a novel bisalkaloid derived from *Thalictrum acutifolium* (Hand.-Mazz.) Boivin, 1389
Thenoyltrifluoroacetone
Thenoyltrifluoroacetone, a potent inhibitor of carboxylesterase activity, 751
Thermodynamics
The modulation of the DNA-damaging effect of polycyclic aromatic agents by xanthines. Part I. Reduction of cytostatic effects of quinacrine mustard by caffeine, 625
The modulation by xanthines of the DNA-damaging effect of polycyclic aromatic agents. Part II. The stacking complexes of caffeine with doxorubicin and mitoxantrone, 635
Toward RNase inhibitors: thermodynamics of 2′-CMP/RNase-A binding in multi-ion buffer, 1937
Thia fatty acid analogues
Inhibition of rat lipoprotein oxidation after tetradecylthioacetic acid feeding, 1127
Thiazolidinediones
Toxicological consequences of altered peroxisome proliferator-activated receptor γ (PPARγ) expression in the liver: insights from models of obesity and type 2 diabetes, 1
Troglitazone does not protect rat pancreatic β cells against free fatty acid-induced cytotoxicity, 1281
Thioredoxin reductase
Drug-resistant human lung cancer cells are more sensitive to selenium cytotoxicity. Effects on thioredoxin reductase and glutathione reductase, 1875
Thiourea
Thiourea toxicity in mouse C3H/10T½ cells expressing human flavin-dependent monooxygenase 3, 1941
Thonningia sanguinea
Antioxidant properties of Thonningianin A, isolated from the African medicinal herb, *Thonningia sanguinea*, 1725
Thonningianin A
Antioxidant properties of Thonningianin A, isolated from the African medicinal herb, *Thonningia sanguinea*, 1725
Thymidylate synthase
Multiple mechanisms of resistance to methotrexate and novel antifolates in human CCRF-CEM leukemia cells and their implications for folate homeostasis, 105
Thymocyte
Involvement of the peroxisome proliferator-activated receptor alpha in the immunomodulation caused by peroxisome proliferators in mice, 1885
Thymocyte apoptosis
A selective plasmin inhibitor, *trans*-aminomethylcyclohexanecarbonyl-L-(*O*-picolyl)tyrosine-octylamide (YO-2), induces thymocyte apoptosis, 1315
Thymus
Involvement of the peroxisome proliferator-activated receptor alpha in the immunomodulation caused by peroxisome proliferators in mice, 1885
Thyrotropin-releasing hormone (TRH)
Pharmacologically distinct binding sites in rat brain for [^{3}H]thyrotropin-releasing hormone (TRH) and [^{3}H][3-methyl-histidine^2]TRH, 2197
3T3-L1
Effects of 1,1,1-trichloro-2,2-bis(*p*-chlorophenyl)-ethane (*p,p'*-DDT) on 3T3-L1 and 3T3-F442A adipocyte differentiation, 997
TNF
Comparison of inhibition of ovalbumin-induced bronchoconstriction in guinea pigs and *in vitro* inhibition of tumor necrosis factor-α formation with phosphodiesterase 4 (PDE4) selective inhibitors, 1527
Topoisomerase I inhibitors
Fas/CD95-mediated apoptosis in human glioblastoma cells: a target for sensitisation to topoisomerase I inhibitors, 881
Topoisomerase II (EC 5.99.1.3)
Reduced DNA ligase activity in etoposide resistant human lymphatic leukaemia CEM cells, 259
TPA
Basal levels and patterns of anticancer drug-induced activation of nuclear factor-κB (NF-κB), and its attenuation by tamoxifen, dexamethasone, and curcumin in carcinoma cells, 1709
Transcription
Induction of UDP-glucuronosyltransferase 1A8 mRNA by 3-methylcholanthene in rat hepatoma cells, 767
Transcription factor
Activation of transcription factors by drugs inducing oxidative stress in rat liver, 139
Monoamine neurotoxins-induced apoptosis in lymphocytes by a common oxidative stress mechanism: involvement of hydrogen peroxide (H_2O_2), caspase-3, and nuclear factor kappa-B (NF-κB), p53, c-Jun transcription factors, 677
Carbohydrate responsive element-binding protein (ChREBP): a key regulator of glucose metabolism and fat storage, 2075
Transformed cell
Modifications of deoxycytidine kinase and deaminase activities by docosahexaenoic acid in normal and transformed rat fibroblasts, 717
Transgenic animals
Alzheimer's disease and oxygen radicals: new insights, 563
Transnitrosylation
In vivo nitric oxide transfer of a physiological NO carrier, dinitrosyl dithiolato iron complex, to target complex, 485
Transport
Pharmacological characterization of the ATP-dependent low K_m guanosine 3′,5′-cyclic monophosphate (cGMP) transporter in human erythrocytes, 945
Trazon
ESR analysis of spin adducts of alkoxyl and lipid-derived radicals with the spin trap Trazon, 1465
TRH analogues
Pharmacologically distinct binding sites in rat brain for [^{3}H]thyrotropin-releasing hormone (TRH) and [^{3}H][3-methyl-histidine^2]TRH, 2197
TRH radioligand binding
Pharmacologically distinct binding sites in rat brain for [^{3}H]thyrotropin-releasing hormone (TRH) and [^{3}H][3-methyl-histidine^2]TRH, 2197
TRH receptors
Pharmacologically distinct binding sites in rat brain for [^{3}H]thyrotropin-releasing hormone (TRH) and [^{3}H][3-methyl-histidine^2]TRH, 2197

TRH-degrading ectoenzyme (TRH-DE)
Pharmacologically distinct binding sites in rat brain for [^{3}H]thyrotropin-releasing hormone (TRH) and [^{3}H][3-methyl-histidine^2]TRH, 2197
Trichophyton sp
Antimicrobial effect of resveratrol on dermatophytes and bacterial pathogens of the skin, 99
Tricyclic
Pharmacological approaches to prion research, 1383
Trimetazidine
Recognition forces involved in mitochondrial binding to a low-affinity trimetazidine binding site related to anti-ischemic activity, 1691
Triton X-100
DNA sequence of butyrylcholinesterase from the rat: expression of the protein and characterization of the properties of rat butyrylcholinesterase, 2101
Troglitazone
Toxicological consequences of altered peroxisome proliferator-activated receptor γ (PPARγ) expression in the liver: insights from models of obesity and type 2 diabetes, 1
Troglitazone does not protect rat pancreatic β cells against free fatty acid-induced cytotoxicity, 1281
Tubulin
Involvement of microtubules and mitochondria in the antagonism of arsenic trioxide on paclitaxel-induced apoptosis, 1831
Tubulin inhibitor
Inhibition of tubulin polymerization by vitilevuamide, a bicyclic marine peptide, at a site distinct from colchicine, the vinca alkaloids, and dolastatin 10, 707
Tumor vasculature
A doxorubicin–CNGRC-peptide conjugate with prodrug properties, 897
Tumour cell
Methionine synthase activity and sulphur amino acid levels in the rat liver tumour cells HTC and Phi-1, 381
Tumour necrosis factor alpha
Inhibitory effect of adrenomedullin on basal and tumour necrosis factor alpha-stimulated endothelin-1 synthesis in bovine aortic endothelial cells is independent of cyclic AMP, 149
Type 2 diabetes mellitus (T2DM)
Toxicological consequences of altered peroxisome proliferator-activated receptor γ (PPARγ) expression in the liver: insights from models of obesity and type 2 diabetes, 1
Tyrosine hydroxylase (TH)
Stimulation of catecholamine biosynthesis *via* the protein kinase C pathway by endothelin-1 in PC12 rat pheochromocytoma cells, 977
Tyrphostins
Mechanisms of apoptosis by the tyrphostin AG957 in hematopoietic cells, 689

U937 cells
Degradation of glyceraldehyde-3-phosphate dehydrogenase induced by acetylleucine chloromethyl ketone in U937 cells, 1857
U-937 GTB
Modulation of pyridyl cyanoguanidine (CHS 828) induced cytotoxicity by 3-aminobenzamide in U-937 GTB cells, 1491
U50,488
κ-Opioid receptor agonist inhibition of HIV-1 envelope glycoprotein-mediated membrane fusion and CXCR4 expression on CD4$^+$ lymphocytes, 1037
UDP-glucuronosyltransferase
UDP-glucuronosyltransferase activity, expression and cellular localization in human placenta at term, 409
Tissue-specific regulation of canine intestinal and hepatic phenol and morphine UDP-glucuronosyltransferases by β-naphthoflavone in comparison with humans, 1683
Reverse geometrical selectivity in glucuronidation and sulfation of *cis*- and *trans*-4-hydroxytamoxifens by human liver UDP-glucuronosyltransferases and sulfotransferases, 1817
UGT activity
Tissue-specific regulation of canine intestinal and hepatic phenol and morphine UDP-glucuronosyltransferases by β-naphthoflavone in comparison with humans, 1683
UGT gene expression
UDP-glucuronosyltransferase activity, expression and cellular localization in human placenta at term, 409
UGT1A8
Induction of UDP-glucuronosyltransferase 1A8 mRNA by 3-methylcholanthene in rat hepatoma cells, 767
UGT2B
UDP-glucuronosyltransferase activity, expression and cellular localization in human placenta at term, 409
Ultraviolet light
Cell-impermeant pyridinium derivatives of psoralens as inhibitors of keratinocyte growth, 31
Uraemic toxin
Effect of protein-bound uraemic toxins on the thermodynamic characteristics of human albumin, 1287
Urea inhibitors
Structural refinement of inhibitors of urea-based soluble epoxide hydrolases, 1599
Urokinase-type plasminogen activator
Effect of malondialdehyde–acetaldehyde–protein adducts on the protein kinase C-dependent secretion of urokinase-type plasminogen activator in hepatic stellate cells, 553
Uroporphyrinogen oxidation
Bilirubin and uroporphyrinogen oxidation by induced cytochrome P4501A and cytochrome P4502B. Role of polyhalogenated biphenyls of different configuration, 615
UVA light
Mechanisms of growth inhibition in keratinocytes by mercurio-substituted 4′,5′-dihydropsoralens, 2001

Vanadium
Vanadyl as a catalyst of human lipoprotein oxidation, 375
Inhibition of gluconeogenesis by vanadium and metformin in kidney-cortex tubules isolated from control and diabetic rabbits, 1371
Vascular tone
Characterisation of cyclic nucleotide phosphodiesterase isoforms in the media layer of the main pulmonary artery, 1763
Vasoactive metabolites
Associations between human liver and kidney cadmium content and immunochemically detected CYP4A11 apoprotein, 693
Ventricles
Inhibition of type 1 protein phosphatase activity by activation of β-adrenoceptors in ventricular myocardium, 1069
Ventricular fibrillation
Mitochondrial gene expression and ventricular fibrillation in ischemic/reperfused nondiabetic and diabetic myocardium, 543
Verapamil
Effects of Ca^{2+} channel blockers on amiloride-sensitive Na^+ permeable channels and Na^+ transport in fetal rat alveolar type II epithelium, 1547
3-Isobutyl-1-methylxanthine (IBMX) sensitizes cardiac myocytes to anoxia, 2055
Vesicular monoamine transporter
A novel mechanism of action and potential use for lobeline as a treatment for psychostimulant abuse, 89
Vincristine
Expression of *p53*-family members and associated target molecules in breast cancer cell lines in response to vincristine treatment, 1609
Vitamin C
Autoschizis: a novel cell death, 1773
Vitamin E
Modulation of apoptosis and improved redox metabolism with the use of a new antioxidant formula, 1305

Vitamin K_3
Autoschizis: a novel cell death, 1773
Vitilevuamide
Inhibition of tubulin polymerization by vitilevuamide, a bicyclic marine peptide, at a site distinct from colchicine, the vinca alkaloids, and dolastatin 10, 707
VLDL-production
HOE 402 lowers serum cholesterol levels by reducing VLDL-lipid production, and not by induction of the LDL receptor, and reduces atherosclerosis in wild-type and LDL receptor-deficient mice, 1755
Voltage-clamping
Hydrogen peroxide-induced current in *Xenopus* oocytes: current characteristics similar to those induced by the removal of extracellular calcium, 569

Xanthine oxidase
Antioxidant properties of Thonningianin A, isolated from the African medicinal herb, *Thonningia sanguinea*, 1725
Xenopus
Differential regulation of Ca^{2+}-dependent Cl^- currents by FP prostanoid receptor isoforms in *Xenopus* oocytes, 1797
Xenopus laevis oocyte
Obligatory role of membrane events in the regulatory effect of metformin on the respiratory chain function, 1259
Xenopus oocyte
Hydrogen peroxide-induced current in *Xenopus* oocytes: current characteristics similar to those induced by the removal of extracellular calcium, 569
Xylulose 5-phosphate
Carbohydrate responsive element-binding protein (ChREBP): a key regulator of glucose metabolism and fat storage, 2075

YC-1
Inhibition of superoxide anion generation by YC-1 in rat neutrophils through cyclic GMP-dependent and -independent mechanisms, 577
Yeast three-hybrid
A GAL4-based yeast three-hybrid system for the identification of small molecule–target protein interactions, 1619
YO-2
A selective plasmin inhibitor, *trans*-aminomethylcyclohexanecarbonyl-L-(*O*-picolyl)tyrosine-octylamide (YO-2), induces thymocyte apoptosis, 1315

Zaprinast
3-Isobutyl-1-methylxanthine (IBMX) sensitizes cardiac myocytes to anoxia, 2055
Zymosan-activated plasma
Effects of 5-aminoisoquinolinone, a water-soluble, potent inhibitor of the activity of poly (ADP-ribose) polymerase, in a rodent model of lung injury, 293